

COMMERCIAL EDUCATION IN PUBLIC SECONDARY SCHOOLS

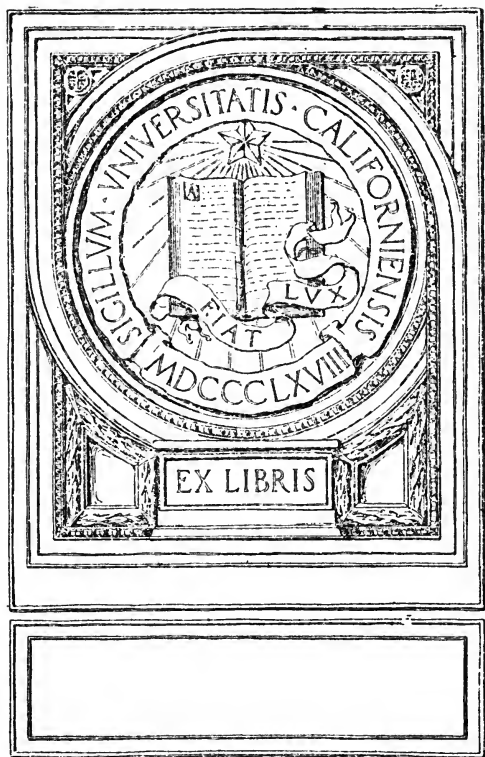
F. V. THOMPSON

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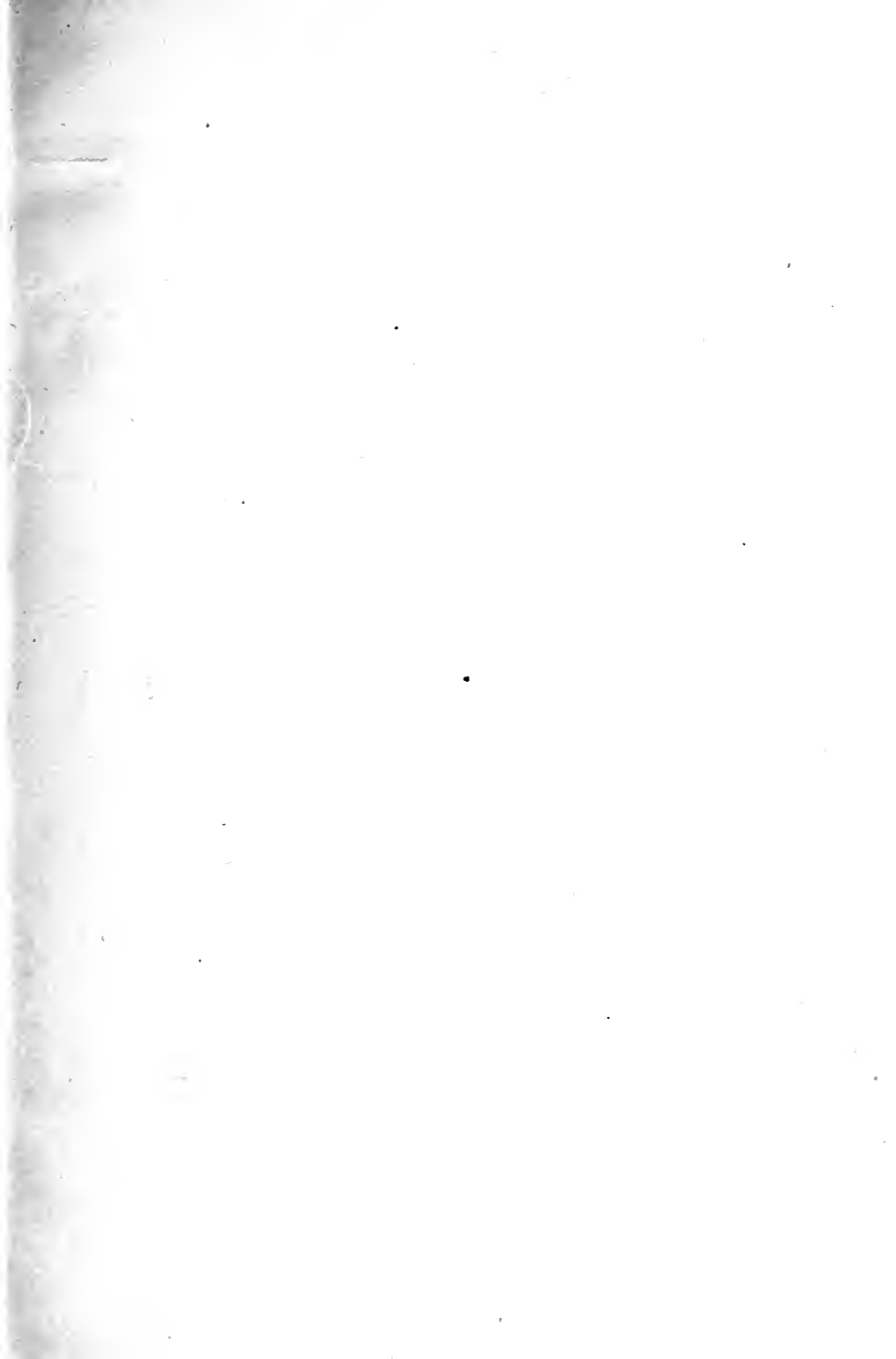


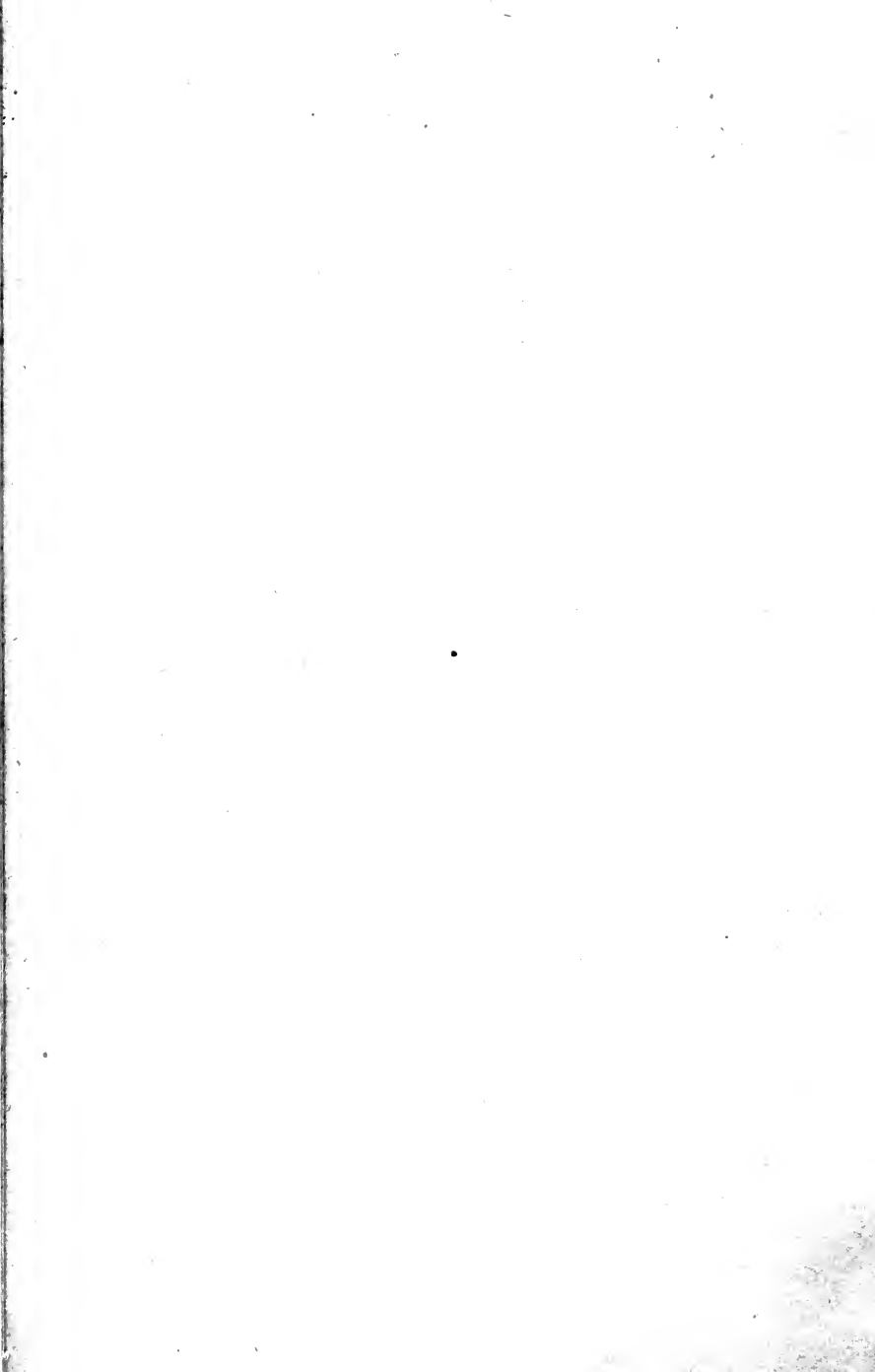
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SCHOOL EFFICIENCY SERIES
PAUL H. HANUS



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THE School Efficiency Series comprises about ten volumes by as many educational experts on Elementary School and Kindergarten, High School, and Vocational Instruction, Courses of Study, Organization, Management and Supervision. The series consists of monographs — with additions plainly indicated in each volume — constituting the report of Professor Hanus and his associates on the schools of New York City, but the controlling ideas are applicable as well in one public school system as in another.

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SCHOOL EFFICIENCY SERIES

**Commercial Education in
Public Secondary Schools**

SCHOOL EFFICIENCY SERIES

Edited by **PAUL H. HANUS**

Commercial Education in Public Secondary Schools

By **F. V. THOMPSON**

**ASSISTANT SUPERINTENDENT OF SCHOOLS
BOSTON, MASSACHUSETTS**



UNIVERSITY OF
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EDITOR'S PREFACE

THIS book deals with some important contemporary problems of commercial education in secondary schools, considered from the point of view of the investigator, teacher, and administrative officer, and aims at constructive proposals based on the actual needs of business as it is. These constructive proposals are the outcome of a critical examination of contemporary commercial education in secondary schools, together with certain investigations in the field of business in several cities in the United States, and of earlier studies by the author of commercial education in Europe. The volume also contains, in Chapter VI, Mr. Thompson's report on commercial education in the high schools of the city of New York, constituting a part of my report submitted to the Committee on School Inquiry of the Board of Estimate and Apportionment in 1912.

Although, as Mr. Thompson says in his Preface, there is considerable literature on commercial education, it is also true that there is much uncertainty and not a little actual misconception concerning the aims, scope, and methods of education for commercial life in the minds of business men and teachers alike—confusion and misconceptions that interfere with the formulation of just aims, and prevent profitable endeavor in preparing our young people for business careers.

Mr. Thompson's discussion of the distinction between clerical training and training for business, of desirable differentiation between commercial courses for the two sexes, his appeal to investigation to secure a fact basis for his contentions and recommendations, his insistence on the necessity of coöperation between business and education for

the training of workers and leaders in industry, together with his practical suggestions for rendering this coöperation effective, make this book a timely and, we hope, also a helpful contribution to the solution of the problem of how to secure satisfactory commercial education for prospective business men in our secondary schools.

PAUL H. HANUS

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AUTHOR'S PREFACE

THIS volume does not present a comprehensive treatment of commercial education as a general subject. There is no dearth of treatises of this character, and of fairly recent date. Those writings cover the broader aspects of theory and practice, foreign commercial higher schools, and an exposition of the need and importance of commercial education of secondary grade. The purpose of the present book is to offer a descriptive, critical, and constructive treatment of current problems in commercial education; the treatment is further limited to the problems of the secondary schools. Throughout the book will appear the conviction of the author that readjustment of organization and methods, changes of direction, and expansion of our conception of the province and purposes of commercial education are imperatively needed. In the volume will be found as a separate section (Chapter VI) the report of the author on commercial schools and courses maintained by the public school system of the city of New York.

F. V. THOMPSON

JANUARY, 1915

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Commercial Education in Public Secondary Schools

COMMERCIAL EDUCATION IN PUBLIC SECONDARY SCHOOLS

CHAPTER I

PRESENT CONDITIONS IN EDUCATION FOR COMMERCIAL LIFE

IT is hardly necessary today to argue for the adoption of commercial education as a part of our system of public education. Commercial education some time ago passed through the period of struggle for recognition; we are now asking ourselves about the value of the kind of commercial education which has established itself on its present firm foundation in our high school system. Stated otherwise, commercial education may now be submitted to some degree of appraisal to determine what changes and adjustments appear desirable. The obligation of making a satisfactory appraisal as a basis of constructive treatment is consequently incumbent on the author.

Commercial education has made long strides within the last decade, and we are still in the midst of a rapid expansion of this type of instruction. A study of conditions in sixteen of the largest American cities (pages 4 to 6) shows a considerable proportion of all secondary school pupils enrolled in commercial classes. The sums required for maintenance are consequently large; the expense for buildings and equipment is correspondingly impressive. We are probably spending more today for the commercial course than for any other single course in our secondary schools. Out of an annual budget of \$5,000,000 the city of Boston is spend-

ing, in round numbers, about \$700,000¹ annually for commercial education. By the simple computation of multiplying the number of commercial pupils by the per capita cost, it will be easily seen that similar sums are being expended in other large cities. The American public is ready nowadays to ask very searching questions about the value of educational projects in relation to their cost; commercial education, consequently, constitutes a fit subject for investigation and, if the need be indicated therefrom, for improvement.

It is apparent, likewise, that the vocational destinies of a great many boys and girls are at stake. If our general system of commercial education needs to be reconstructed, if it is not suited to current demands, if our boys and girls are not being efficiently trained, then the injustice to many thousands of children is great indeed. The school assumes a serious *added* responsibility when vocational education of any kind is undertaken, for thereby the school more intimately than before assumes guardianship over the welfare and destiny of the children.

Furthermore, the welfare of commerce and industry is vitally affected by commercial education. The expansion and prosperity of commerce is essential to the well-being of all of us. Industry has been able to overcome in part its lack of skilled labor by the use of automatic machinery, operated frequently by unskilled laborers; but commerce must depend chiefly, by the nature of its demands, upon the ability and training of those who are the product of our schools. We are in the midst of a notable period of agitation for the better training of industrial workers. Progressive states are rapidly adopting comprehensive programs for the establishment of industrial education. For even stronger reasons, preparatory training for commercial occupations must receive equally careful attention. We must see whether what we are attempting is adapted to actual conditions.

¹ Obtained by multiplying the number of commercial pupils in day and evening high schools by the per capita cost.

AN INQUIRY INTO THE PRESENT STATE OF COMMERCIAL
EDUCATION IN SIXTEEN AMERICAN CITIES

The province of this chapter is to summarize broadly the present condition of commercial education, especially in the large cities of our country. Certain conditions of interest and value are evident from the chart given on pages 4 to 6. The data presented were secured through personal correspondence with the superintendents of the various cities enumerated.¹ The questions asked of the superintendents were intended to bring out significant general facts.

Questions Submitted to Superintendents

1. What proportion of all secondary pupils in your city are found in commercial courses? (Approximate answer.)
 2. Do you have a separate commercial high school, or commercial courses in general high schools, or both?
 3. Do you segregate the sexes in commercial instruction?
 4. Do commercial pupils get related academic work, e.g., commercial English, history, modern languages?
- If so, are commercial divisions in academic subjects distinct from other divisions, i.e., sections pursuing general high school work?
5. Have you "intensified" commercial courses? If so, what years?
 6. Is salesmanship a part of your commercial work?

Replies Received from Superintendents

In the following tabulations of the information received, the answers are stated as nearly as possible in the words of the informant; in some cases exact quotations are given.

¹ In New York and Boston more extensive studies were made by the author.

CITIES	1	2	3	4	5	6
Cleveland	10%	Separate commercial high school. No commercial courses in general high schools ¹	No	Yes	No short term course	Yes; in last year with banking and business organization
Kansas City	20%	Commercial courses in general high schools	No	Only in part. No commercial English. Intend to differentiate further	No. Intend to specialize further	Not at present. Planned for the future
Los Angeles	About 10%	No. Commercial courses in all our high schools	No	Yes and No	No	Only business practice
San Francisco	30%	Separate commercial high school and a commercial course in Mission High	No	Yes in some cases	Courses arranged for two and four years	Not yet
Newark	16½%	We have two commercial and manual training high schools	No	Commercial English and commercial arithmetic and any allied commercial subjects have separate divisions. Academic subjects taught in academic divisions	Two-year commercial courses	Yes

Not large at present. Expect a decided increase when two new high schools are finished	Commercial courses in general high schools	No	Yes	Not answered	Separate school distinct from regular high schools
Buffalo					
5%	No separate commercial high schools; each school has a commercial course	No	"Commercial pupils get related academic work, which is the same as for other courses"	"The commercial course was 'intensified' about two years ago"	Salesmanship is not taken up as a separate subject
25%	Commercial course separate	No	Yes	No	No
25%	Commercial courses in general high schools	No. Sexes not educated together except in colored high schools	Yes, but not in separate sections	No	In City College (high school for boys) taught with other commercial subjects
40% of pupils in general high schools; two special high schools	Both	Not in general high schools; separate in special high schools	Not usual in general high schools	Washington Irving High School. Three-year courses in general high schools	No
New York					

¹ For boys and girls.

CITIES	1	2	3	4	5	6
Chicago	About 20%	No separate school. Commercial courses in all high schools except two	No	Where necessities of organization make it feasible	Two-year courses in all high schools. In these are found most of the pupils	No. Except in the Lucy Flower. Elementary work for department store girls
Philadelphia	About 33½%	Commercial courses in general high schools	No mixed high schools in the city	Mostly for convenience of roster working, but not necessarily	No	Not to a large extent
St. Louis	25.8%	Commercial courses in general high schools	No	Receive related academic work in regular classes wherever possible	One- and two-year courses for pupils who cannot remain	Its incorporation is being considered
Boston	50%	Both	Not in general high schools	Yes, in High School of Commerce. Not usual in general high schools	Roxbury High School for Girls. First two years. Some intensification in Girls' High and Dorchester High	Yes, in Girls' High and in Dorchester High and High School of Commerce
Pittsburgh	Approximately 25%	Both ¹	No	Yes, to first part of question. Partially so to second part of question	Only in the short high school course	Yes. (Course of study does not mention the study)
Detroit	About 25%	Separate high school of commerce and commercial course in general high schools ²	No	In part; English, history, modern languages, not separate in some divisions	No. Has a two-year course	No

¹ Course of study and enumeration of schools does not show a special school.² Not yet completely separate.

What the Answers Show

From replies to question one, by reference to the annual reports of the various cities, it will be a simple matter to compute the number of pupils and consequent cost of commercial courses.¹ From ten to sixty per cent of all high school pupils in our large cities are enrolled in commercial courses; on an average, about a third of all pupils in the cities studied are in commercial courses.

Question two was designed to bring out the country-wide condition of commercial education respecting the principle of specialization of high school organization for greater efficiency. The returns show that a majority of the large cities do not maintain special commercial schools. New York, Boston, Cleveland, San Francisco, and Springfield have special high schools of commerce. Detroit has a special school in the making, and Newark combines manual training and commercial instruction, while the other cities report commercial courses in general high schools.

The answers to question three relate to the segregation of the sexes in commercial instruction. Not a city in the list has adopted segregation as an avowed educational policy. Philadelphia has no mixed high schools. Boston and New York have separate commercial high schools for boys, but maintain mixed classes in general high schools. Cleveland has a separate high school of commerce, with no differentiation of work for the sexes.² We may generalize by saying that the country-wide conception of commercial education is that boys and girls meet the same demands in business and can be trained by the same methods, with the same materials of instruction. Evidence will be submitted later (Chapter VI, New York Report, page 119) to show that this conception is untenable; because commerce has become, or is becoming, as specialized as industry has long been.

¹ See the figures in the first column, pages 4, 5, 6.

² The course of study indicates a separate arrangement of studies, but the principal states that there is no segregation of sexes.

In limiting its efforts chiefly to clerical accomplishments, commercial education is committing an error, at least in the training of boys. Apparently we are preparing our boys for distinctly feminine occupations in commerce, an error as great from a vocational standpoint as to fit boys to become expert in such industrial occupations as dress-making and millinery. Evidence to substantiate this position is not lacking. From the Massachusetts Census of 1905, statistics dealing with the number of males and females employed as stenographers and typewriters show 1338 males to 10,876 females, a ratio of one male to eight females. From special reports of the United States Census of 1900 the following situation is apparent. "In 1900 there were 85,086 women sixteen years of age and over employed as stenographers and typewriters in continental United States. The number thus engaged formed 1.8 per cent of the total number of gainfully employed females over fifteen years of age, this occupation ranking thirteenth among the leading occupations in which more than three fourths of the total number of adults employed were women. Not only do females form a majority of those engaged in this occupation, but their relative importance is increasing. Of the total number of persons ten years of age and over thus employed in 1900, 76.6 per cent were females, as compared with 63.6 per cent in 1890. Moreover, it is only among women that the occupation is of considerable importance. Of the female breadwinners over fifteen years of age, eighteen in every thousand were stenographers, as compared with only one in every thousand among male breadwinners over fifteen years of age."¹

Question four is designed to bring out evidence concerning the relation of the "academic" work — that is, non-technical work — to the technical work. It is evident that the general condition is not encouraging. Usually English is stated to have a commercial flavor, sometimes history.

¹ Taken from Bulletin No. 8, Girls' Trade Education League, Boston, Mass. Further evidence is given in Chapter VI, New York Report.

In special high schools of commerce a noticeable attempt at coördination is being made. Even in the special commercial schools in New York City, as will be seen in Chapter VI, much more should be done than is attempted, and it is not improbable that the same may be said of most other special schools. The usual practice throughout the country is to distribute commercial pupils for academic work in general divisions of the school. The courses of study for commercial pupils guarantee that the main emphasis will be far more academic than vocational.¹

From the character of some replies it is evident that the term "related academic"² is variously understood. For example: "Commercial pupils get related academic work which is the same as for other courses." "Related academic work is taught in academic divisions." "Pupils get related academic work in regular divisions." It is fairly obvious that there is a noticeable lack of agreement as to what processes or subjects constitute the fundamental bases for commercial education. It is noteworthy, also, that there is sometimes lacking among educators an admission that non-technical subjects should be related to vocational work.

Question five was designed to bring out facts relating to the emphasis and concentration of effort on commercial subjects in commercial courses; also, to discover if special opportunity is provided for pupils who cannot remain throughout the customary high school period. Some progress in these important matters is reported in some of the largest cities of our country — Chicago, Pittsburgh, Milwaukee, San Francisco, and Boston. The Washington Irving High School of New York City has intensified commercial work in the second and third years of a three-year course. The

¹ See Chapter VI, pages 122, 123.

² It is a generally accepted principle in vocational education of any sort that subjects such as English, history, and mathematics should be closely related to the vocation taught. "Related academic subjects pertaining to commercial education" obviously means the particular kind of English, history, mathematics, and other subjects, suitable for commercial instruction.

Roxbury High School of Boston has a two-year intensified commercial course for graduates of elementary schools, and there is some intensification of commercial work in the third and fourth years of the Girls' High School and of the Dorchester High School. The term "intensified course" is interpreted in two ways, not widely different. Some cities are accustomed to call short commercial courses intensified work; other cities use the term to signify the regular commercial course with a larger proportion of technical instruction to general work than is ordinarily found. Short commercial courses are usually intensified in this latter sense, since here technical subjects commonly are given a greater proportion of time in the program. Sometimes a four-year course is "intensified" in the later years, resulting in a concentration of effort upon technical subjects, such as stenography and bookkeeping.

Question six was designed to bring out evidence of a larger conception of the province of commercial education. Secondary commercial education up to the present time has confined itself chiefly to clerical training. The incorporation of the subject of salesmanship shows a beginning, at least, of a wider outlook. The fact that a majority of cities report either actual incorporation of the subject of salesmanship or a plan for this incorporation lends encouragement to an optimistic conviction that commercial education is not content to remain permanently in a condition of unyielding conservatism. Boston is showing considerable energy in going ahead with experimental plans in newer fields of commercial training.

We may profitably pause for a moment to call attention to the significance of incorporating salesmanship in our commercial courses. The teaching of salesmanship under public school auspices apparently began in Boston, where an experiment was made in the evening schools as early as 1904. This work was originally of the nature of continuation school endeavor and was confined to the improvement of persons already engaged in salesmanship as an

occupation. The High School of Commerce of Boston has taught salesmanship from its beginning, in 1906. Two general high schools in Boston began experimental courses in the subject in the fall of 1912 (see page 82). Much credit for carrying on the propaganda of the idea of salesmanship as a commercial vocation is due to the Women's Educational and Industrial Union of Boston, where a class for the training of store workers and teachers of salesmanship has been carried on for five years.¹ Mention should be made of the work in Chicago, where elementary work for department store girls is conducted in the Lucy Flower High School, and in Cleveland, where salesmanship is reported in the last year in connection with other commercial subjects. Salesmanship, as a subject taught to commercial employees, is found in continuation schools in several cities, notably in Cincinnati and Boston. In the latter city particularly, the work has been carried on for several years in continuation schools, with a constantly expanding influence.² That the schools should not have seen in the major function of business — viz., buying and selling — a field for training is not strange, since business itself has comparatively recently recognized such a need. But the need today is coming into clear recognition with business men, with the result that commercial education must either keep abreast of current demands or fail to meet a just expectation.

PRESENT NEEDS IN COMMERCIAL EDUCATION

Commercial education today, if we may generalize, needs to be roused to a clearer recognition of new duties and

¹ Mrs. Lucinda W. Prince, director of the school of salesmanship connected with the Women's Educational and Industrial Union, has been a pioneer worker in this new field and has rendered conspicuous service to the cause of public commercial education by training teachers equipped to meet some of the newer demands.

² The importance in business of the functions of buying and selling will be shown in the New York Report, page 110; also in Chapter IV, page 67.

expanding demands. Here and there are outposts who see the changed horizon and beckon and signal those behind, but the great army is lethargic and 'slow to rouse. Too many schools are satisfied to go on as in the past, paying little heed to changing commercial demands. Business changes and develops by evolutionary processes; the school often progresses by abrupt and usually violent upheavals, revolutionary in character. Changes are ordinarily precipitated by the sudden dissatisfaction of citizens, when their sporadic attention fastens upon the schools and sees glaring defects, unheeded until they have become oppressive. If we desire to substitute progress by evolution for progress by revolution, we should seek to establish a close connection between the schools, especially vocational schools, and steadily moving social and economic forces. Commercial education today needs an awakening to new ideas and a recognition of new conditions to bring about a realization of the need of adjustment. Manual training education has recently been greatly stimulated and vivified by the competition of industrial education; in fact, much of manual training is being made over into industrial training. The vision and revelation which have come to manual training are lacking as yet for commercial education.

There is in promise no outside force to spur and arouse commercial education, which will be compelled to remodel itself without the example of an educational competitor. In justice it ought to be said that commercial education has never lapsed into the dissociated-from-life attitude that has been so generally characteristic of manual training. Commercial education has never made the extravagant claims of general culture or of psychological influence in the way of mental discipline, by which the adherents of manual training have endeavored to maintain their cause. Commercial education, within the limits of a restricted vision, has always sought to keep close to its objective field. It has aimed to prepare for a job, to enable the individual pursuing the work to fit into economic society and to benefit

himself by meeting an evident demand for his talent. Commercial education, however, must be criticised for seeing its field narrowly, for failing to recognize the newer demands which a rapidly expanding business world is forced to make, and for ignoring the complexities of modern commerce, which have created a whole new array of commercial functions. A recent writer¹ calls attention to the fact that in industry twenty-five per cent of the industrial occupations of today did not exist a generation ago. A similar condition is found in commerce, but commercial education has shown no parallel adjustment to changed conditions.

Commercial education has made a substantial development and improvement since its adoption into the schools. Better accommodations have been provided, more adequate equipment and apparatus furnished, teachers, better trained and paid, have been employed. In this advance, however, commercial education has progressed only with the general improvement of the school system. The people have grown in faith in the worth of education; more money has been spent and more opportunities demanded in the schools. Commercial education has advanced with the development of the school system, but has not kept pace with the growth of business; it has progressed with the schools, but not with business; it has studied the trend of the school, but not the trend of business; its leadership has been scholastic, not commercial. Today, commercial education finds itself of the school, schoolish, and not of the business house, business-like.

RELATIONS BETWEEN COMMERCIAL EDUCATION AND THE BUSINESS WORLD

This situation is in part explained by the process through which commercial education came into the public schools and by the influences which have continually surrounded it. Commercial education was perhaps the first subject to

¹ Arthur D. Dean, *The Worker and the State*.

be generally adopted by the high school as a concession to the public desire that the school should furnish preparation for vocations. Twenty years ago most educators did not believe in this aim or sympathize with it, but the people, who sporadically bestir themselves about what the schools are doing, insisted and commercial subjects were grudgingly admitted to the curriculum. No trained teachers were available; hence, through necessity, many untrained and incompetent instructors were brought into the schools. In spite of this, commercial education has made a praiseworthy struggle against initial school prejudice and other obstacles, and today finds itself in a relatively strong position compared with other school enterprises. The names "commercial teacher," "commercial course," and "commercial pupil" are no longer terms of school reproach, as was true a decade or so ago. Commercial education has been busy establishing its position in the school world, where it has felt the spur and the whip, and has paid little or no heed to the business world, where it has found but neglect and indifference. Business, consequently, is in no small degree responsible for the chasm between the school and business, and for several reasons. The business world has paid but little heed to commercial education, to the character of courses of study, to the efficiency of teachers, or to the encouragement and development of the idea of commercial training. This assertion cannot be made of business men of certain progressive foreign countries, but it is particularly true of our country and of England. Mr. Herrick¹ points out as an exception the example of the London Chamber of Commerce, which has been largely instrumental in creating and fostering commercial education in England, and by an examination method has created a system of awards to commercially trained persons. The Chambers of Commerce of Boston and New York have quite recently shown an active interest in the subject and have appointed special

¹ *Meaning and Practice of Commercial Education.*

committees to cooperate with school authorities in matters of improvement respecting commercial education. But these instances have been too rare and have not as yet vitally affected the policies of commercial education, which, left so largely to its own devices, has felt that it owes its allegiance first to the general school system and only remotely to business. Again, business itself has only recently begun to feel the influence of the application of scientific principles. No definite formulation of business standards and demands has been obtainable by the schools. The schools, manifestly, could not train for important needs of which the business man himself was uncertain. Only the clerical demands of business have for a long time been fairly definite and standardized, and these needs the schools have seen and met with a reasonable degree of success.

In the New York Report (Chapter VI) will be seen evidence showing the disagreement among business men respecting the essentials of commercial education. There has been in the past no widespread faith in commercial education on the part of business men. True it is that the business man who needs a stenographer or a bookkeeper will apply to a business school for such an employee; but when he wants a real apprentice, a young man to learn the business, he commonly has far more faith in native endowment than in any amount of specialized training. This last statement is not intended to be a criticism. It may very probably be that the business man has been right in his instincts and impressions, but with the application of scientific principles to business, as in all other pursuits, the importance of training must needs become increasingly apparent. Native endowment not supplemented with training will eventually be as unprofitable in business as it recognizably is in the many other occupations which have already progressed to a stage of development beyond that attained by business.

The result of this separation of method and interest between commercial education and actual business puts commercial education at a disadvantage when compared with in-

dustrial education. There is a curious dissimilarity between the methods and general characteristics of the two forms of applied education, whereas seemingly there is every reason for close similarity. Industrial education has been fortunate in the causes and conditions to which it owes its inception. The movement sprang from coöperation between the two interested parties, the factory and the school. Industrial education has insisted upon freedom from scholastic traditions and customs. It has asked a chance to shape its own destiny and it has not been afraid to tread untrodden pedagogical paths. Whatever may result from this new and important departure from pedagogical traditions, the foundations have been wisely and firmly laid.

THE SPECIAL PROBLEM OF COMMERCIAL EDUCATION TODAY

Commercial education has become firmly rooted in our school system under very different conditions. It did not begin as a coöperative movement — business sharing the burden with the school. It was a school enterprise in the beginning, and on the whole bears the characteristics of a school enterprise today. The problem of commercial education today is beset with particular and burdensome difficulties. In the main, the problem is to reconstruct the edifice. It would be far easier and simpler, perhaps, to erect a new structure; but this is not practicable. Our investment is made, our building is erected, and great numbers of workers, conscientious and deserving, have given their lives to the task in a service as honest as any could be, and as efficient, perhaps, as conditions made possible. As a general principle, in improving an established educational system the factory custom of scrap-heaping is not possible. Education, like government, has been obliged to proceed by the method of adaptation and adjustment.

Commercial education, however, must recognize the need of readjustment. Though the excuses for the pres-

ent state of affairs are many and good, they explain only the past and do not justify a continuation of the present situation. The business man has his obligation no less than the schoolmaster. He cannot continue to criticise and complain; he must take hold and lift. It is fortunate that the competitive conditions of business today aid in urging such coöperation. The "store school"¹ in progressive business houses is becoming more and more common because a higher degree of service is demanded. Educational courses looking toward higher standards of efficiency can eventually be more profitably furnished in a regularly organized school, which, when properly guided, can compete in its special function better than a business organization can compete outside its own field. The proper economic and effective plan is for the two forces to unite: the school to teach related theory (those aspects of business which can be organized into courses of instruction), and business to guide and counsel the teacher and to offer the business house as the workshop of practical experience. The business house cannot make the best and most permanent achievement with "an actual school in the business house," any more than the school has been able to succeed with the plan of "an actual business in the school." Let us adopt the sounder principle of industrial education which might be stated as follows: "Actual education in the shop and in the school."

There is in this country today no commercial school which has the definite connection with business that effective industrial schools have with productive shops. The problem of tying up the commercial school to the business house is far more complex than is the problem of coöperation between the shop and the industrial school. The problem of relating academic work to industrial training has presented no extraordinary difficulties, but the way is not so plain in dealing with commercial education. Points

¹ Sometimes known as the "corporation school."

of view are widely divergent as to what should constitute a program of studies. Manufacturers are in substantial agreement about the related academic and technical work which should be elements of industrial training — mechanical drawing, shop mathematics, industrial history, and the like. No such agreement is discoverable amongst business men. Some business men exalt moral training, stating that honesty, integrity, good manners, and truthfulness are the prime essentials of a business education. (See Appendix, pages 155-181.) These persons express indifference concerning the specific character of school programs and would as soon employ the graduate of a Latin School as the graduate of any other school. Other business men, and they are perhaps in the majority, emphasize the importance of such personal endowments as accuracy, quickness, adaptability — qualities which are the product of no particular course of study and of no particular type of school. For certain functions of business, such as the clerical ones, business men expect specific training; and such training now constitutes the bulk of the business preparation given in the schools.¹

It is evident that a strict analogy between industrial and commercial education is at present impossible. The reason is very likely inherent in the nature of the two economic processes, production and distribution. Of the two, the distributive process (business) seems to be more complex and to require for effective administration a larger number of different types of individuals. Other broad differences between the fundamental processes of production and of distribution may be noted which must ere long have their effect in educational programs. Industry deals primarily with the modification of inanimate material, while commerce deals more specifically with human adjustments. The resulting educational principles are important, and the reasons for the greater complexities of commercial educa-

¹ See Chapter VI, page 115.

tion become clearer. A program of studies for a commercial school undoubtedly will need to have far more of the human studies than does the program of an industrial school. There will need to be more English, modern languages, and æsthetic studies. These subjects are found universally in commercial school programs, but we have made the mistake of not teaching these liberalizing subjects with a vocational objective. We have too uniformly taught the English, the modern languages, and the art of college preparatory schools, and failed to teach these subjects from the point of view of their use in commerce. Certainly experience has shown that definiteness of aim in pursuing school subjects has a high motivating value for that large class of pupils who cannot be interested in subjects wherein deferred values are the chief incentives for effort. Thousands of young men and women are found in evening courses labeled "civil service," consisting mostly of fundamental grammar school subjects, such as history, geography, arithmetic, and grammar. Because these subjects lead toward the goal of ambition, mature students industriously pursue them, which would not be the case were the same subjects offered merely for general information and improvement.

To claim, as is frequently done, that high school courses as now organized for academic or college preparatory purposes form an appropriate equipment for the non-technical part of a commercial school program, is to beg the question. None will deny that the pupil who succeeds with this sort of mental training is not at a disadvantage, but the injustice is to that large number who would be effective recruits for commerce, although they do not succeed in abstract academic work. The dropping out of commercial pupils from high schools forms a startling feature of current school statistics. The New York study presents details of this situation.¹ While the causes of these desertions

¹ See page 97.

are many, one undeniable cause is the failure of pupils to succeed in a scheme of unrelated and unsuitable academic work. It is recognized, of course, that the whole problem of elimination from high schools is serious. For our public high schools to go on cheerfully eliminating from fifty to ninety per cent of all pupils who enter, constitutes a procedure which must indicate one of two things: either our courses are not suited to the average intelligence of that already selected group who have persisted through the elementary school, or we must bring a strong indictment against the average young mind as incapable of receiving secondary instruction. We shall not wish to admit this second proposition, nor can we, in the face of a growing body of investigation upon the subject of elimination from school, assign other significant reasons not stated here. The studies of the Douglass Commission of Massachusetts, of Van Denberg, and of Miss Barrows in New York agree closely that it is not economic pressure chiefly which drives the pupil out of school, but mainly conditions within the school and under its control. Our public high schools cannot continue to pursue an aristocratic ideal by insisting upon standards of their own choice, but must seek standards essentially democratic and possible of achievement. The present figures of elimination and retention ought to be reversed if our high schools wish to attain or retain full public confidence.

To some this admonition will appear to be a plea for lowering school standards, but the change recommended is not one of degree, but one of essential conception and constitution of high school courses. No claim is set forth that the kind of remodeled courses we need are easy of definition; nor will definitions be attempted at this point. We must proceed to formulate new courses through the method of experiment and constructive organization. We must formulate tentatively, proceed courageously, maintain honestly; then measure and appraise our results; and finally, incorporate additions or changes to which the re-

sults obtained lead us. This procedure is but the application of the scientific method to an educational problem, and it is but a natural public expectation that in determining its own vital policies the school, which has fostered science, should itself adopt scientific methods of procedure.

It should be stated as a broad summary that commercial education is in a receptive mood today. Hopeful experiment and earnest readjustment are found in numerous communities. Commercial education in the main is willing to learn, is not restive under criticism, has no blind adherence to past or present traditions. Instances of the willingness of communities to experiment in improved forms of commercial education are seen in the establishment of special high schools of commerce. Boston, for example, maintained for years clerical commercial education in general high schools which furnished sufficient provision for all pupils desiring this kind of work. A special high school of commerce in Boston was established in 1906 to furnish a different kind of commercial instruction, to experiment with a new idea of commercial training. This idea was mainly to furnish to young men a preparation for commercial opportunities other than clerical. Other cities have been enumerated in this chapter showing like progressive tendencies, and they all illustrate, as far as they go, the hopeful attitude of American communities toward the problem of placing commercial education upon a more efficient and adequate basis.

CHAPTER II

SCHOOL ORGANIZATION AND TEACHERS IN COMMERCIAL EDUCATION

WE have said that the subject matter and methods of commercial education are characteristic of the school far more than of business. Nowhere is this more apparent than in high school organization as it affects commercial courses. The trend of business is toward uniformity throughout the country, but there is no similar tendency in commercial education. Business practices in Boston and St. Louis undoubtedly are quite similar, but preparatory education for commerce in these two cities differs widely (see page 6). The differences in high school organization are caused by adherence to the particular pedagogical fashions obtaining in different communities. There is marked disagreement as to whether commercial education should be conducted as one course among several courses in a general high school, or in a special school devoted to the single aim. Different sections of the country apparently are committed to particular educational beliefs in this matter. The East is turning to the special school, while certain sections of the West are emphatic in their adherence to the general, or "complete," high school.

THE "COMPLETE," OR GENERAL, HIGH SCHOOL

The arguments for the "complete," or general, high school are well stated in the following quotation taken from an address of W. J. C. Bryan before the North Central Association of Colleges and Secondary Schools at its eighteenth annual meeting.

“1. For a very large part of the nation no other kind of school would be possible or practical on account of the cost of establishment and maintenance.

“2. Small towns and rural communities that now support one high school feebly could not be persuaded, should not be expected, to assume the cost of providing another, especially when the number of pupils hardly suffices for one.

“3. Additional courses necessary to meet the wants of the community may be supplied much more readily and economically than entire new schools.

“4. Only in large cities that maintain several high schools could this question be entirely practical. According to the average percentage of pupils enrolled in the high school, towns under ten thousand inhabitants would not be likely to furnish more than two or three hundred pupils at the outside.

“5. Even in large cities maintaining several high schools, the cost of time and carfare, which would be necessary on account of distances to be traveled, would be an item equal to one fifth of the per capita charge to be borne by the community, a burden so heavy that it could not be carried by many, and would result in serious diminution of numbers, precluding a choice of the course to be taken, and deterring the boy or girl from going further.

“6. It is very doubtful whether the atmosphere of the specialized school is so natural or so healthy as that of the complete high school. That which is offered as a special advantage is likely to prove a disadvantage; the narrowing effect of associating with pupils of the same tastes and aptitudes and outlook could not well be helpful. It is not likely to result in breadth of view or right perspective. Mingling with other people of different tastes is broadening, corrective of bias, productive of kindly feeling. Just as it is one of the best results of college life that a student meets men from

other communities and sections, so it is of great value to boys and girls of the high school to meet and talk with those who have other tastes and aptitudes and a different outlook.

"7. There is danger in early specialization. The youth who enters the high school has little knowledge of the world's work. The high school is to give him extended vision, to show him the avenues of activity that are open to him. If instead of enabling him to find himself and his field of action by disclosing to him his powers, his tastes, his natural tendencies, it directs his efforts into some one particular channel, it may do him irreparable harm. Early specialization stands in danger of joining hands with industry and commerce in the exploitation of youth.

"8. The complete high school is likely to be judicial in its attitude toward different subjects of study, not unduly exalting some at the expense of others, not over-persuading any one against his will or inclination. It offers the greatest latitude in the choice of studies, and makes it possible to change course with the least loss.

"9. The presence in the same school of pupils pursuing different courses of study, having special equipment suited to special needs, is a source of education, a means of forming a judgment as to the actual effect and desirability of these different courses. It is broadening in its effects, constantly advertising the diversity of directions in which men and women may profitably labor, discovering to each one his own aptitude for service.

"10. Democratic institutions are jeopardized by the estrangement of different classes of workers, and by the misunderstandings and jealousies resulting from ignorance of work and workers, which gives free play to false imaginings as to the character and quality of persons engaged in unknown lines of employment. If

these workers grow up together, learn to know and respect those who choose other avenues of activity, there will be in knowledge so obtained the best preventive of estrangement or misunderstanding in the future.

"11. To build up walls of partition between pupils who are taking the classical course and pupils who are taking the manual training course or the domestic science course or the art course or the scientific course or the commercial course or the agricultural course, or between pupils of any two courses, by segregating each group in its own building, is to magnify unessential differences and to create classes, unnecessarily exalting the work above the worker, losing the man in the stuff with which he earns the means of living.

"12. One of the most valuable contributions the high school makes to the education of its pupils is its social training, which is dependent upon the presence of pupils of both sexes and various degrees of social intelligence and culture. It is a matter of common observation that refinement of manner and the habitual observance of proprieties of time and place become the characteristic of high school pupils during their course in a school attended by boys and girls of all predilections as to life work."

The above lengthy quotation states the moral, pedagogical, and social reasons for the kind of high school organization known as the general, or "complete," high school, which is the prevailing type in the smaller cities of the country. The arguments presented are pertinent, comprehensive, and appealing, and those who agree with Mr. Bryan would seem, perhaps, to have an adequate basis for their assent. Communities adopting the general high school as the more desirable type will, as a consequence, expect that commercial, industrial, and household arts courses, as well as older subjects, will be offered in the same school. It is, of course,

apparent that the possible achievements of specialized courses will be limited or advanced by the resources and opportunities of the general high school plan.

No one will challenge the social and moral ideals set up in the argument by Mr. Bryan, but many, including the author, will dissent from the assumption that they are only to be realized adequately in the general high school. We may point out, at this juncture, what we believe to be the weakness of the position of those who maintain the superiority of the general high school as an effective instrument for meeting current educational and industrial needs. The quoted arguments for the complete high school neglect the consideration of one essential principle, viz., efficiency. The assumption is that a complete high school can do many things as well as a number of special schools can separately do particular things, and this is a large assumption. Business and industry today proceed upon very different principles. The fundamental economic law operating in industrial society is that efficiency is the result of specialization. Can the schools adequately train for economic society upon an entirely different principle?

Ought the schools to set up ideals independent of social and economic conditions, to create an atmosphere deemed superior by the schools which is artificial and different from actual conditions, so that the pupil is bewildered and helpless when thrust into the realities of life found in business and industry? Shall the school prepare for life upon a scheme of its own choosing, with its own standards and scholastic ideals, or shall we join the school to our other social institutions, and train for life by living methods, with real standards, by making the school reflect the economic and social conditions into which the pupils are going? If the chief function of the public school is to fit pupils for "complete" living according to the ideal type assumed by many schoolmen and sentimentalists, then only may the practical standards of efficiency and reality be sacrificed for more ethereal advantages, and our program for vocational

education must be undertaken by school agencies other than those now existing.¹

It remains to be proved that boys need the presence of girls in the classroom for refining and socializing purposes. This again is an assumption, and there is a great body of evidence in this country and abroad which might be adduced to the contrary. The loss of the democratic principle by segregating pupils into special schools sounds ominous and if true would give us pause. But can it be demonstrated that this is necessarily the case? May this not well be a boggy-man of the schoolmaster? No school system conducted under a segregated sex plan reports this evil as an adverse result. Our boys and girls will go into segregated industries, vocations, or occupations, and may well begin in the secondary school, the finishing school for the majority, to face vocational conditions. The counsel that early specialization is avoided by the "complete" high school may be true, but not on that account can it be proved superior. In this country choice of a vocation is delayed beyond that found in any other nation, but have the beneficial results been such as to prolong choice still further? *To delay choice for the average secondary pupil is to prevent the pursuit of a systematic training for the vocation chosen.*

Evils there are in the world, and we wish to shield our children as long as possible. All of the arguments presented for the "complete" high school are worthy of serious consideration, but in the end we are faced with the stubborn alternatives: Are we to train our boys and girls for a Utopia or for the real world into which they are going?

We desire our boys and girls while in high school to enjoy an environment as favorable as possible in its social, moral, civic, and intellectual conditions, but many will desire in addition sound, practical, and effective vocational train-

¹ There is a distinct movement in this country to establish newer vocational schools entirely distinct from schools now existing. The reasons are frankly a challenge to the spirit, capacities, and sympathies of those who today control the policies of our public schools.

ing. For many patrons a kind of high school organization which produces either result without the other fails to achieve its purpose; what is desirable, consequently, is a type of high school organization which is effective in both relations; an institution meeting this proper double expectation might aptly be called a *complete* high school.

THE RELATION BETWEEN COMMERCIAL COURSES AND THE SOCIAL AND INDUSTRIAL STRUCTURE

For our present purposes, this dissent from the arguments of Mr. Bryan is to show the setting of commercial education in its school background.¹ The problem of commercial education is vitally bound up in general school problems; for what is deemed wise as a usual school procedure makes the conditions underlying the possibility of achievement of the commercial school or course. Thus we find the variation of practice respecting ways of organizing commercial courses. One section of the country, which looks upon the high school as a retreat from the evils of the world, will undertake commercial courses in accordance with a plan which embodies that conviction. Another section, which believes in the superiority of coeducation on an educational or social principle, will insist in making commercial courses coeducational. Actual business procedure, as we have indicated, may have uniformity throughout these various sections of the country, but this fact has no influence upon the organization of commercial education.

A similar situation exists with respect to commercial programs of study; here again local educational fashion rather than actual business needs is the decisive factor. There are, indeed, instances more glaring of disparity between commercial courses of study and business demands than in matters of school organization. Programs of study from San Francisco and Los Angeles contain the subjects stenography

¹ Chapter III, pages 37 to 43, deals with other issues raised by Mr. Bryan.

and typewriting for the seventh and eighth years of the elementary school.¹ It is quite certain that there is no justification by reason of actual business practice for the early introduction of these technical subjects. Again is seen the domination of the school in deciding independently the essentials for vocational preparation. The intermediate school, or the earlier beginning of the secondary program of studies, is undoubtedly a progressive educational step; but in making this advance there is often little care taken that vocational subjects early attempted are adapted to the stage of maturity and to the capacities of young pupils.

In order to obtain efficiency in commercial courses or other vocational courses, we must get away from the notion that the school is an institution separate from our social and industrial structure, — that the school, independent from industrial and social forces, has the right to initiate and conceive its own functions and activities. As long as the school was absorbed in the classical or general cultural ideal, difficulties were fewer. But now that the school has widened its purpose and is beginning to assume the burden of preparing for vocations, a different procedure must needs be adopted. Instead of dwelling in academic shades and transmitting only the facts of traditional culture, the school-master, if he is to pass intelligently upon vocational questions, must get out and study the realities of industrial society, and become a worker and server among the prosaic crowds of his fellow men.

Commercial courses of study and matters of organization, it is needless to say, should be founded upon actual business conditions. Pedagogical fashions and scholastic notions should not be allowed, as at present, to dominate and control these matters. For commercial education the vital necessity at the present time is to know what are business needs and business demands.² To this end, systematic study of business conditions affecting commercial education

¹ Also contained in proposal for New York City; see page 51.

² Bulletin No. 3, Massachusetts State Board of Education.

should be undertaken.¹ We have the example of special commissions studying industrial conditions in their relation to industrial education, and as a result industrial schools are being founded in a practical and effective manner. The results of industrial investigations have had a marked effect upon what the schools were already offering as industrial education, that is, manual training, which was often the conception of the school of industrial training. A clear and sharp line has been recognized and drawn between the two types of educational endeavor and each today is filling better its special function. It is very probable that some such similar effect will be the result of a close study of business needs; and it is also probable that what we have today as commercial education will be found to occupy the relation to business that manual training in the past has occupied to industry.

Who shall make the essential investigations into business conditions and interpret their import for commercial education? Not the school man unaided, surely, nor the business man unassisted, but a coöperative body of representatives of both callings. As already stated, we shall not so easily or so quickly come to agreement upon the problems of commercial education where conditions are more complex and practice more varied, but we shall make some important discoveries which will be of immediate profit to commercial education. The relation of coöperative effort will be of value both to business and to the school; if nothing else came of it than a spirit of friendliness and understanding, the result would amply repay all the effort. But far more

¹ Commercial education should not remain uncritical of those business demands which are incompatible with the higher aims of education. While the counsel is given that pupils should be trained for a real world, the school should select for models of business ethics those types, increasingly numerous in actual business, which are sound and defensible by accepted moral standards. Indeed, commercial education may contribute its share in bettering the general ethical standards of business. Inspired by the example of the best business practices, the trained recruits from commercial schools may well prove to be a leaven in the movement for better ethical standards in business.

than this is sure to come, and with persistent study a problem at present seemingly obscure will become clearer. Particularly is it the duty of business organizations to devote thought and energy to the question of improved commercial education. Practically no commercial community in this country today is without a Chamber of Commerce or similar business organization. Few such bodies busy themselves with questions of education. The example of the business bodies of cities like New York, Boston, Chicago, and Cleveland should find more imitators, for we shall make no widespread reforms in the means and methods of commercial education until the business man assumes his full share of the burden.

THE TEACHING FORCE AVAILABLE FOR COMMERCIAL EDUCATION

In considering the problem of teachers for commercial schools it is again apparent that strong business influences are lacking. A commercial teacher in the common acceptance is an individual who teaches stenography, typewriting, bookkeeping, and penmanship. As minor accomplishments, he may instruct in commercial arithmetic and business law. Commercial teachers are usually trained in private business colleges, and few have pursued a general education farther than the high school. Fewer still have had business experience or served what might be likened to a business apprenticeship. This situation is but the natural working of the law of supply and demand in the schools. Commercial education has been conceived as merely clerical training and has demanded naturally a kind of teacher who could bring the stock results. Cities like New York and Boston, which secure teachers from an examined and rated merit list, make provision for securing commercial teachers practically as noted above. In Boston there are two eligible lists for commercial teachers, one for college graduates and one for non-college graduates; but the technical requirements are

quite similar, and as usual the principal subjects of examination are clerical. A similar condition holds in New York City. Quite recently Boston has established a new eligible list for teachers of salesmanship; the requirements established are designed to secure practical business training and experience.

What is needed to improve the quality of teachers of commercial subjects is to secure candidates from two other important sources; viz., from business life and from higher schools of commerce. New York City credits business experience in lieu of a part of the required teaching experience, which is a recognition of a sound principle. The failure of the schools to see the possibilities of securing teachers from higher schools of commerce is a loss to the cause of commercial education. During the past decade there has been a pronounced development of higher commercial education in our universities and colleges. An inquiry sent to twenty of the more important higher schools of commerce shows that these institutions are doing little in the way of training commercial teachers for secondary schools. The reason is obvious. The higher schools of commerce are training for the more important functions of business, and the secondary schools are occupied only in training for the minor occupations of business. The secondary school creates no demand for the product of the higher school, and there is consequently no market.

As instances in point of the above situation may be quoted extracts received from the inquiry just mentioned. Professor Edward O. Jones of the University of Michigan writes as follows: "We have had an increasing number of calls in the last two or three years for men to take teaching positions in university extension work, and in high schools in large cities. The difficulty with high school positions is that so much emphasis is placed upon stenography and type-writing. We do not teach those subjects and we do not encourage college men to fit themselves to teach such subjects." Professor H. S. Person, director of the Amos Tuck School

of Administration and Finance, Dartmouth College, says: "It may interest you to know that although we receive many inquiries for teachers and are able to recommend several of each year's class as particularly qualified for such service, we are rarely able to induce our students to take up teaching. All wish to go into active business." Professor William A. Scott, director of the Course in Commerce, University of Wisconsin, bears the following testimony: "As a result of the very small demand which we have had for special training for the teaching profession, we have not been able to develop that branch of our work as much as we should like, or as much as we could and would, provided there was a demand for it. I write you thus frankly because I fully appreciate the gravity of the problem, and want you to understand that we are ready and willing to do our part toward its solution." L. F. Schaub of the Graduate School of Business Administration, Harvard University, says: "As a by-product of our School it is of course natural that occasionally we shall turn out a young man who wishes to take up teaching as a career. We have thus far made no special effort to attract such men. As a matter of fact, in our five years' experience but two of our students have accepted positions as teachers, and in both cases the men were considerably older than the average of our students and had been teaching before coming to this school."

On the other hand, it should be stated that the higher schools of commerce frequently state their willingness to undertake the preparation of commercial teachers, should there arise a demand. Professor Edward O. Jones of the University of Michigan says in this connection: "We are willing to encourage our men to become candidates for positions as principals of commercial high schools, and for other of the higher administrative positions in connection with that line of work. Their peculiar qualification is that when the public demands something higher of the commercial course than the preparation of clerical help, these men will know how to organize courses on business management,

etc." In short, it is easily evident that the present obstacle to the employment of college-trained commercial teachers is the certainty that young men so prepared will find no outlet in our public secondary schools.

The practicability of employing men and women experienced in business affairs as teachers in our public schools may perhaps be a matter of some doubt. Few school men would look with favor upon the innovation. And yet, in the field of clerical commercial education, successful teachers have come from the counting room. Industrial education has not been afraid to call into the classroom successful foremen from the bench. The general requirement in state-aided industrial schools in Massachusetts is that teachers shall have had at least five years' experience in the industries for which preparatory education is designed. In the college schools of commerce, business men are playing an important rôle as incidental lecturers and instructors, usually in special phases of business administration. There arises at once the difficulty of offering to business men a recompense sufficient to attract them to the schoolroom. But this same difficulty has not been found insuperable in our higher technical schools, where men of good talents, capable of commanding good salaries as expert engineers, have the temperament or, more likely still, the altruistic incentive which prompts them to serve as teachers with less financial reward and greater personal satisfaction.

We should not possess successful law and medical schools unless there were to be found men of similar stamp and inclination. It would seem that the business man should be sought to furnish in some degree instruction in business principles.¹ No type of education which has successfully fitted for a vocation has been able to do so unaided by the persons actually engaged in the vocation, and commercial

¹ It is recognized that a man of good business training alone is not necessarily a good teacher of business. Particularly in our secondary schools is it desirable that teachers possessing technical knowledge should add thereto professional training in the art of teaching. Desirable qualifications of an

education will take a progressive step by recognizing this fact. The problem of securing efficient teachers is pressing throughout the range of our whole vocational education program. Commercial education with its longer existence is not confronted with such an imperative need as is industrial education, but it might well take example from the procedure of industrial education by showing a spirit of readiness to go outside the academic pale for teachers who have had the advantage of real contact with vocational conditions.

adequate equipment for a commercial teacher in a secondary school might well be stated as follows: (a) a course of training in a university school of commerce supplemented by actual business experience, and (b) a course of training in a university school of education supplemented by actual teaching experience. As is true in industrial education, many effective teachers may be drawn from the field of actual practice, but to be most effective the teacher with technical knowledge must acquire skill in the art of teaching.

CHAPTER III

THE GENERAL HIGH SCHOOL AND COMMERCIAL EDUCATION

THE Census of 1910 lists over five hundred cities and towns in the United States with a population of ten thousand or over. Comparatively few of these communities are sufficiently large or are financially competent to support more than one high school. It is evident that the general high school will be the usual type of institution which must serve the vocational as well as the academic needs of most communities. This fact is well brought out in the argument of Mr. Bryan.¹ To improve commercial courses and other specialized courses, we must see that the parent institution, the general high school, offers the essential conditions for effective achievement. It is manifestly impossible for commercial courses to prove efficient without reasonable freedom of procedure and active encouragement.

THE READJUSTMENT OF THE GENERAL HIGH SCHOOL

Serious doubt about the efficiency of the general high school is prevalent, and with reason. The general high school as we have known it in the past will not, without modification, prove to be an institution fitted to meet modern vocational needs. "The high school has meandered along somewhat aimlessly in academic paths and has been strangely unmindful of the interesting and urgent work waiting to be done."² The assumption upon which the com-

¹ See page 23.

² Charles Hughes Johnston, *The High School*. Charles Scribner's Sons, 1913.

munity or general high school has proceeded has been and is today in a considerable degree that general training is sufficient for the life and vocational purposes of all pupils. We are coming to see, however, that efficient training for life tasks cannot be based upon general training alone, because life tasks more and more are specific and must be prepared for specifically. Specialized training as a school principle is more economic than educational. Those nations first comprehending the principle have forced the issue upon their schools. Economic conditions which have influenced the schools elsewhere are more than national; they are world-wide. Educators as well as economists must feel the force of the statement, "the era of exclusiveness is past." If we, in this country, are to achieve economic survival and supremacy, our school systems must make a large contribution. Margins between success or failure today are small. Integration of all the forces which can make a nation great is necessary. Business, government, and education must unite; if not, then by the loss of the single force we shall be beaten. Today the nation looks to education as the ally by means of which our national survival and supremacy shall be realized.

It is agreed that the general type of high school will be called upon for large service in this new order. The present teaching corps in the present buildings must bear the immediate burden. The people who support the schools demand it and they will be too insistent for denial. The law of competition will force it. At the present moment the schools feel a new pressure, this time not the pedagogical pressure of educational theorists, but the economic pressure which comes from the very wellsprings of society, the struggle for survival and supremacy of nations, states, and communities. There is no going back; we schoolmasters may sigh for the peaceful ways of the past, but our day has fallen in the strenuous period of the present. If we would serve society, we must measure up to the new standard. Whichever community most completely comprehends

the new order and perceives the course ahead will be the torchbearer for other communities pressing keenly onward so as not to be laggards in the race.

Not only commercial education but industrial and professional education are concerned in the making over of our general high schools, which must now meet more effectively the varied educational needs of our increasingly complex social structure. A fundamental lack in our general high school is the failure to supply to the boys and girls an adequate motive. The general, academic, or abstract cultural motive has proved ineffective; we have failed not only to meet industrial needs, but have failed to interest and hold our boys and girls.

In the present order of society, the career motive is bound to be a dominant incentive to boys and girls in high schools. Our new environment compels this situation. The influence of the press, the hum of the streets, the multiplication of inventions, the increase of machinery, the stir and bustle of life in the city and in the country, all serve to turn the thoughts of our boys and girls toward the practical activities which are the genius of our age. The academic quietness of school halls cannot and should not resist these influences. We live in a practical age; there is so much work to do in the world, and our boys and girls must soon join the ranks of active workers; they are eager to take their places, which is the chief reason why they leave school so early. Every investigation into the causes for leaving school shows that not necessity, but desire, has been the impelling motive. Our pupils will stay more willingly if they realize that they are being better prepared for future vocational needs, that their chances for efficient participation and better rewards in life tasks are increased. The boy willingly practises for the actual games because he appreciates that he cannot win without practice. But the practice is like the game, and the boy can see the connection at all times; so the school should have considerable similarity to industrial society, with the connection constantly apparent. Why then should we not

adopt the career motive as the vital incentive around which to build our courses in general high schools?

The general high school ought, then, to readjust itself in the light of the natural aspirations of youth as well as by reason of economic need and pressure of modern environment. The career motive may well furnish the basis for the reorganization of our high schools as well as for the disposal of their educational resources and the particular arrangement of studies. Not only greater interest on the part of pupils, but achievements in practical vocational education, may well be expected from our recommended procedure. Though not fully recognized, the career motive has been potent in our high schools, but the careers for which the school has prepared have been too few and restricted. The boy who wishes to go to college has an impelling career motive in his high school work. The number of pupils in high school who pursue courses for the sake of knowledge alone is not definitely determinable, but the usual impression of high school teachers is that this number is comparatively small.¹

The elective system was intended to be a motivating principle as well as a means of meeting individual needs; but this system was based too much upon an exaltation of the individuality of the student, and not enough upon the demands of society. It was defective in that it was too subjective, too little objective. It sent the boy out with an exaggerated notion of the ego and a false idea of social subordination; for society in the main will not fit the boy; the boy must fit society. The elective system gave no adequate notion of community values, took little heed of social needs, disregarded the economic laws of supply and demand applying to employment, and in the case of the unadapted individual led him to think that society was wrong and he was right. Furthermore, it is evident from the figures of

¹ For those who persist in high school the general educational motive is by no means uncommon. For the larger number of those who fail to persist the present motives of high school subjects have probably proved inadequate.

elimination from high school that the elective system has failed to furnish an impelling motive for achievement and for persistence in school.

The new high school order will either reject the elective system or will profoundly modify it. The boy may elect, under guidance, what curriculum will best fit him for a vocational career; but, having selected, he will submit to all the requirements which his choice entails. With a goal in view he can better grapple with the difficulties involved and more cheerfully labor over the weary stretches, for in such a way is success in life achieved; the boy with a strong motive will not quail when his courage is challenged by obstacles. Biography is filled with the story of grim struggle, of disheartening checks, of ceaseless industry, and of final triumph. The boy will not so soon quit when he sees that the school is a real practice ground for actual life careers. The elective system offered as motives the pleasure and satisfaction to be found in the pursuit of selected subjects, motives which appeal to those who love knowledge for the sake of knowledge; ~~but~~ not provide experience of the kind which furnishes training for the difficulties or demands to be expected in life careers.

We have approached the subject of the reorganization of the "complete" high school with observations somewhat general in nature. Specific suggestions looking toward the improvement of present conditions should logically be forthcoming. In attempting to meet this expectation, the subject of commercial education will be treated in relation to the other courses usually maintained in the general high school; naturally commercial courses will receive the greatest emphasis in the statement of specific details.

The content and scope of many subjects found at present in the program of studies of general high schools can be used as the basis for immediate procedure. The readjustment necessary will take place chiefly in a reorganization of material with appropriate expansions to meet specific needs and with desirable contractions where present emphasis is

unimportant. In the organization of the school, the matter of chief importance is a definite division of the program of study into separate groups; in other words, the general high school should become a school of schools, somewhat after the fashion of a university, which is frequently a confederation of a number of schools, each with a special function. A general high school attended by boys and girls lends itself easily to a division like the following:

1. A sub-school of college preparation (in those sections of the country where colleges still insist upon a preparation of their own selection).
2. A sub-school of technical and industrial training for boys.
3. A sub-school of practical and household arts for girls.
4. Sub-schools of commercial training, preferably distinct for boys and girls.

Whenever the size of ~~the school~~ permits, the sub-school should be allowed and ~~encouraged~~ to concentrate upon the appropriate function assigned. The subjects in each program of study, while often designated by the same name, such as English, mathematics, foreign languages, should be taught from the special points of view; or, more familiarly stated, the English, mathematics, and foreign languages should be the kind most useful and fitting to the specific end sought. In this way the career motive will be a continuous incentive. The career motive will lose force unless the student experiences continuously the influence of the principle. Manual training high schools with one branch of the work academic, in the sense of lacking connection with the immediate purpose of the course, and the other branch technical, appealing to the vocational interest, have not as a class overshadowed the undifferentiated high school with no pretense of furnishing incentives other than those of a general nature. With one element of the course voca-

tional and the other disassociated and "academic," there may naturally result a conflict of forces with a consequent loss of effectiveness.

To the general high school adopting this plan, the difficulties are not appalling. For each sub-school created there are now good models in the special schools in our large cities, and the sub-schools of the general high school can be reproduced in miniature upon the special school model. Most of our high school teachers are adaptable and can teach their subjects from the new point of view; few of them will be willing to admit that they are unable to readjust themselves to new conditions. It will be found that personal preference will lead some teachers to go into one division and some into others; those teachers who prove hostile to the whole idea might be assigned to the college division, where they will probably prove useful as conservators of the old régime.

The larger the school, the easier of application will be this plan. Much of the present standard equipment may be utilized; the manual training equipment may be enlarged to furnish opportunity for technical and industrial operations. Our present physical and chemical laboratories may be expanded to furnish facilities for vocational work. The teaching force will usually need to be enlarged to the extent of employing experts as heads (subject to the principal) of the new sub-schools. A small school will be obliged to combine departments with as much segregation as is economically possible. A small country high school might profitably maintain but two departments, one for agricultural training and the other section for that particular opportunity which is most needed by the community. Summarized briefly, the success of a high school adopting this procedure will be in proportion to the modification effected in the usual general scheme of organization. Better still will be the results if the complete substitution of the plan recommended can be carried out—the plan whereby the school offers a number of different courses, each with spe-

cific aims; with such an opportunity the student will find not only encouragement for a career motive, but the conditions for effective vocational achievements.

EFFECT OF VOCATIONAL INSTRUCTION ON THE CULTURAL VALUE OF SECONDARY SCHOOL WORK

Will not the expansion of the idea of vocation bring a consequent loss of culture in the general influence of the school? Those who raise this query deserve commendation for their concern for the high purposes which the school has cherished. Culture is hard to define and seemingly inconsistent in its exhibitions. From instances that might be adduced, culture appears to be more the result of fortuitous circumstances than the definite product of school training. We might point out the example of the illiterate Italian boy who hums operatic airs and stands entranced before a beautiful painting, and then to the instance of the American college youth who shouts rag-time and besmears with paint the college statuary intended to edify.

We may be skeptical that culture in a definite degree is the certain product of formal educational influence. It is true and praiseworthy that the effort of the school has been to arouse appreciation for culture, moral and æsthetic. To assume that the formal school courses of general or classical schools are the best or only means of imparting what is called culture, is probably untenable. The concrete-minded pupil — and he is in the majority — who fails to find an adequate motive in general high school subjects, will probably resist the intended accompanying culture. If he drops out of school, as he so frequently does, he obviously fails to get either the abstract training or the still more abstract culture. The boy will probably get his culture the way he gets any educational product, i.e., abstractly, if he can assimilate by abstract processes; concretely, if his mind responds to concrete stimuli.

The vocational school is not at a disadvantage in the

laudable competition of trying to lead youth to see the beauty behind the fact. Moral culture we know is not a matter of clean hands, but of clean hearts. Æsthetic culture is not a matter of fine clothes, but of fine feeling. Poverty, in fact, seems to have been the constant condition of the great masters of art, music, and conduct, who have left us immortal mementoes of their visions. Culture is deeper than external appearance. Clothes give us respectability, but not culture. The formal study of art and literature in school has often ended in distaste and a desire to turn away from the intended applications. There is still little relation between commonly accepted educational theory and actual school practice. Assent is given to the abstract proposition of the psychologist that individual minds act in different and peculiar ways, but our school methods continue to exhibit an adherence to uniform methods of procedure. We are beginning to readapt our methods of teaching arithmetic by varying our practices to fit individual needs, but we do not abandon our uniform methods in seeking to impart culture.

✓ The vocational school has a duty toward culture which is recognized by the sponsors of vocational education. While vocational education deals primarily with concrete problems, not on that account must it be inferred that beauty, truth, and virtue will fail to gain recognition. Mr. Kerchensteiner,¹ the apostle of vocational education in Bavaria, emphasizes above all else the cultural possibilities of vocational training. If it be that the concrete-minded pupil will get his culture concretely, and in that way only, then the opportunity of vocational education for imparting practical culture is greater than that of general education, and the burden of obtaining greater results will be a natural consequence.

Returning to the consideration of plans of high school organization, it may be pointed out that in a thickly settled

¹ *Education for Citizenship*. Rand, McNally Company.

state, where small cities with good transportation facilities are closely grouped, differentiated high schools may be established by coöperative effort. One town may maintain the commercial high school for the group of towns, another community the industrial, and still another the college preparatory course. By this simple arrangement smaller communities fortunately located may enjoy all the educational advantages which the large city offers, and with little or no additional cost. The adoption of this plan, in fact, is seriously contemplated in a group of adjoining towns in Massachusetts. Where there are several undifferentiated high schools in the same city, reorganization may be effected in much the same way. This will occasion a regrouping of teachers and a transfer of equipment and material. Practical difficulties are easily apparent, and naturally these will often prejudice teachers against a scheme that disturbs conditions with which they are familiar and to which they are attached. The objections are not those of efficiency and economy but more particularly those of sentiment. Indeed, these objections may prove so potent that the reorganization will be effected within the different schools in the manner indicated for communities possessing but one high school. In our large cities the special high school has come with the growth of the city and the larger percentage of pupils entering high school. The new schools are more often the special schools, while the general high school is not in many sections being reproduced to meet the increased demand for accommodations.

THE NEW STANDARDS OF EFFICIENCY FOR HIGH SCHOOLS

Whatever may be the specific plan locally adopted, we must prepare to tolerate the prospect of reorganization. The rapid growth of industrial education shows how serious and determined an aroused public may become. The advocates of vocational education have occupied this impregnable position: how can we continue to furnish a type of edu-

cation which is prevocational to the liberal professions, and refuse to make provision for the needs of the far larger class who go into industry and trade? A numerical summary of the present situation in our high schools shows that we are offering an appropriate secondary education for the two millions of people who serve us in professional capacities, and have given no heed to the educational needs of the thirty millions who serve us in trade, agriculture, and industry. The new conception of democracy applied to education holds that a free public school system shall furnish equal opportunity, through specific training, to each individual, to make the most of his best chance in life. The awakened political and social conscience of our country will not rest content with legislative and industrial reforms alone; the schools as well must give evidence of an enlarged vision and greater usefulness.

The connection of the problem of improved commercial education with the larger problem of increased scope and efficiency of the public school system is of course apparent. Commercial education and manual training were the first instances of the assent of the school to the demand that the high school should include preparation for non-professional occupations. We have before indicated that neither of these subjects was added as a result of an adequate conception of the nature of vocational education; that both of these subjects have been consistently conventionalized into academic high school subjects.¹ The demand for improved industrial training promises to be met to a considerable degree by the creation of a new system of schools, often conducted under separate auspices and receiving special supervision and subsidy by the state. Improved commercial education, however, promises to come in the schools already established; our investment has been made, our connections have been laid and valuable achievements effected. We shall not, however, meet the new standards of

¹ See page 134.

efficiency or of democracy without readjustment. We must make commercial education truly vocational; whatever principles, methods, or devices prove efficient in other kinds of vocational education must be adopted outright or else adapted to fit the special needs; whatever procedure is indicated by a study of business conditions must likewise be incorporated. Above all else, such specialized functions of education as commercial training must have encouragement and freedom. The general high school may be likened to a household which is called upon to readjust its habits for the more efficient life of its separate members, most of whom are now called upon to forsake their hitherto ornamental existences for careers of economic usefulness.

The new high school will be able to test its usefulness by truer standards of efficiency. The only definite standards in the past have been college entrance requirements. These we recognize are academic, institutional, and applicable to but a small portion of the mass of the pupils. As tests of vocational worth they are valueless. The needed objective standards, drawn from vocational evaluations, cannot now be set forth in the terms of present college requirements, but they can be generally characterized as the standards of social efficiency, and in general it means that the school shall train farmers, mechanics, or merchants as well as it has trained doctors, lawyers, and teachers. Just as we have estimated school proficiency in the past by observing how well our boys and girls pass college entrance examinations, so let us watch the success of our students in commerce and industry. The colleges report to us the standing of our graduates; why should not business men and manufacturers report how our graduates are progressing in industry? Why not give the same attention to industrial standards that we have given to college standards? May we not match college entrance boards with business men's advisory committees? We have long tolerated the criticism of college professors: may we not now hearken to the observa-

tions of the man of affairs? Should not these two influences be given proper proportion? Should the present absurd practice be continued, whereby the interests of one tenth of the pupils dominate those of the other nine tenths, or, more appropriately, in case one must be sacrificed, should exactly the opposite practice be followed?

At the present time our high schools draw comfort from and take pride in the achievement and success of the small number of those highly selected individuals who persist throughout the course. They have been oblivious of the fate of the fifty to ninety per cent of those who fell by the wayside. The enormous human waste product of our high schools has been disregarded. H. E. Miles,¹ chairman of the manufacturers' committee on industrial education of the National Educational Association, summarizes the case as follows: "Our educators have been like the old-time operators of blast furnaces who threw away the slag as bothersome and worthless, not knowing that with a little care it would some day be made into cement and better the life of the world. It is a question, however, if our educators have not as often thrown away the steel as the cement."

The public which the school serves will demand a closer reckoning in the future than in the past. The public will wish to know the fate of one hundred per cent of the pupils, not alone the good fortune of the gifted few. If the advantages of the school are inaccessible to the majority of pupils, then we must indict the methods and organization of the school. If we cannot educate our boys and girls in accordance with the school standards which we schoolmasters have set, we must look for more reasonable standards. If success in economic standards were to be obtained as infrequently as success in the school standards, what a multiplication of poorhouses would be the result! Every boy forced out of school by reason of failure in

¹ Bulletin of the National Educational Association, September, 1913.

school standards who subsequently becomes a useful citizen, a producer and an economic unit, stands as a witness against the reasonableness of school standards.

We shall be obliged to see the educational problem in a larger and more generous light, wherein the needs of all the children are constantly in mind. We must give up the impossible task of trying to force all the children to make the traditional school achievements, which the school says spell success; we can always improve if we do not "complete." Indeed, the effort to improve our boys and girls through educational influences rather than to complete a prescribed scholastic course of our own choosing, promises to become the new educational ideal. Improvement is a possible, actual, and useful ideal, while completion is a limited, contingent, and indefinite aspiration. Commercial education should do more than train some boys and girls to take dictation at one hundred and twenty words a minute, or finish to the satisfaction of the instructor certain model sets in bookkeeping. For the thousand and one jobs in commerce, commercial education can improve the majority of boys and girls so that they can more effectively and more profitably meet the conditions of employment and secure greater life satisfactions for themselves.

The present limited opportunities for "improvement education" in our regular high schools are provided in part by the establishment of evening schools, and, more recently, by the establishment of continuation schools. Other reasons obviously are factors in the establishment of these schools; viz., economic inability of pupils to remain longer in regular day schools, irresponsibility of parents and children, failure to appreciate in time the value of extended educational training.

An instance of the recognition of the rights and needs of one hundred per cent of the pupils is seen in a recent report of the board of superintendents of New York City.¹ Both

¹ See also *School Efficiency*, by Paul H. Hanus, pages 13-15. School Efficiency Series, World Book Company.

the argument and the plan are contained in the following excerpt from the report:

“ THREE COURSES ABOVE THE SIXTH YEAR

“ It seems desirable at the present time, while adjusting special schools for the mentally backward, to give adequate and fair treatment to those children of average mentality who, perchance, are only slow, but who, because of their very slowness, become the retarded children owing to their inability to keep up with the present curriculum. In considering the problem of readjusting the curriculum we regard the present stopping place where the greatest percentage of elimination occurs as the natural point to begin the development of various differentiated courses. The distribution of children among the vocations indicates definite need for elasticity immediately following the elementary school period. After due consideration of many conclusions of weight related to the recent discussion on the subject of the length of the elementary school course in years, the following working principle was evolved, namely: the elementary school course should be made up of six years of universal or coördinate work and two years of flexible work, providing for such differentiation as is needed to meet the needs of individual children or groups of children.

“ We believe also that with the establishment of flexible, differentiated courses of study in the last two grades, in place of the present inelastic curriculum, there will probably be an increase in the gross number of graduates from the elementary schools. As a further result, judging from the experience of other cities, the percentage of matriculates to the high schools could be raised, as well as the absolute numbers entering upon secondary school work.

“ The suggestions made above provide for a course of

study throughout the eight years. We emphasize the need for a definite course during the first six years, but suggest that, beginning with the seventh year, the course should separate into three distinct branches. We would establish an academic course leading to the high school, as at present; we would also establish a commercial course and a vocational course.

“As a suggestion for the utilization of the tentative flexible course for the seventh and eighth years, we should advise the extension of the educational content of the various subjects along the line of commercial training and industrial training. To this end, we submit a suggestive outline of the educational possibilities of such differential courses in the seventh and eighth year.

Commercial

Seventh and Eighth Year Flexible Courses—Arrangement in Detail and Method Optional

English: Literature; commercial; vocabulary; forms; correspondence; advertising.

History, civics, and social life: History of trade and transportation, start locally, and expand evolutionally; commercial law and contracts, insurance, liability laws, charters, taxation, and franchise; commercial organization, partnerships, corporations, mergers, unions, collections, bargaining, coöperative stores; division of labor; occupational accidents and diseases; home-making, relation of individual to home.

Geography: Commercial, economic, transportation and trade relations.

Mathematics: Elementary bookkeeping; accounting, home, business, manufacturing; per capita, mensuration; arithmetic—discount, bills, insurance, interest; banking and foreign exchange; customs; elements of algebra.

Industrial and fine arts: Bases of value—quality, design, construction; method of purchase; vocabulary; commercial design; domestic science and art.

Music: Incidental to education and physical education.

Writing: Legibility, speed; stenography; accuracy, speed; typewriting, accurate transcription.

Hygiene: Personal—clothing, bathing, exercise and recreation, food, exercise; social—ventilation and heat, dust, light; individual utensils, hours of labor, rest; fire drill; first aid.

Nature study: Natural history of commodities.

Business and office practice: Filing and cataloguing.

Languages: For purpose of correspondence, one required, one optional, German, Spanish, French, Italian."

Undoubtedly the principle underlying the above proposition is sound, and the suggestive plan itself worthy of consideration. It is highly important that the specific plans adopted should be thoroughly tested by investigation and experiment. The teaching of stenography and typewriting to immature pupils is particularly of doubtful value, since these subjects have a vocational value only for pupils of much greater maturity, and chiefly for girls, as previously stated (page 8).

Applying the principle of improvement training to the particular problem of commercial education in secondary schools, it is evident that much change of attitude on the part of teachers, of organization within the school, and of methods applied to individual subjects, will be required. If elasticity is a recognized need in the elementary school, how much more is it so in the secondary institution? We shall be obliged to institute a number of new courses to meet the needs of the many whose destinies are as sacred as those of the traditional student who remains four years to finish a prescribed commercial course. Three-year, two-year, one-year, and possibly half-year courses will naturally result. Two considerations will determine the nature of our various courses; viz., the specific business demands for which each course gives preparation, and the circumstances of the pupil respecting his financial competence to remain in school, his mental and physical fitness for the work, and his ambition to prepare himself for a specific commercial occupation.

CHAPTER IV

THREE INVESTIGATIONS AND WHAT THEY MEAN FOR COMMERCIAL EDUCATION

THIS chapter presents the chief facts and conclusions of three investigations conducted in and around Boston during the school year 1913-1914. These investigations were conducted by the following organizations respectively:

The Women's Educational and Industrial Union, Department of Research: *The Public Schools and Women in Office Service*.¹

The Boston Chamber of Commerce: *Report on Commercial Education to the Committee on Education (Chamber of Commerce)*.²

Committee of Teachers (Massachusetts State Board of Education): *Records in Business of Graduates of Public Schools*.³

THE WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION INVESTIGATION

The report of the Women's Educational and Industrial Union is exhaustive in character, covering many phases of the manifold conditions of employment of women in business life. The Department of Research of the Women's Educational and Industrial Union is well equipped to undertake work of the nature attempted, and has in fact made

¹ Published by the Boston School Committee, 1914.

² Special Report, Boston Chamber of Commerce, 1914.

³ Published by the Massachusetts State Board of Education, 1914.

a number of studies into the occupational conditions of women.¹ The present investigation extended through a period of one year, during which time studies were made in the day and evening schools, in employment agencies, in the homes and in the places of occupation of employed women. The case method was chiefly used, and the facts were secured both from written testimony of individuals canvassed and from personal conference with them.

Material presented in this chapter from the above report is selected from two chapters, entitled respectively, "The Public School and its Problems" and "Summary and Outlook." While the report itself discusses a great many problems not presented in this book, the selected portions deal chiefly with those problems and are intended to bring additional evidence upon issues pointed out in the volume itself. From the second chapter are first selected facts and studies regarding the persistence of commercial pupils in high school.²

"The relative persistence of the two types of students taking the academic and vocational courses has also been a subject of much discussion. This tendency is verified by the record of a large class of 635 girls entering one of the Boston high schools in 1909, 441 (69.5 per cent) of whom registered for commercial subjects. . . . The annual loss both in the commercial and academic groups is about one fourth during the first year. During the second year, however, the loss was almost twice as great among the commercial (30.7 per cent) as the academic students (16.5 per cent), and during the third year about one and one half times. The average annual loss for the first three years was 22.1 per cent in the commercial group and 17.5 per cent in the academic group."

¹ *Vocations for Women*, and other reports.

² See also Chapter VI, page 97.

The reasons assigned for the lower persistence of the commercial group are stated as follows:

Many of the girls reach the age of sixteen during the second year at high school, and can easily find positions not requiring particular skill or maturity. When these girls go into office service, they find it hard to advance without additional training, for 40.5 per cent of all girls found in evening high schools were engaged in some of the branches of office service, and nearly one half of this group had begun work before they were sixteen.

Economic pressure, as indicated by the character of the father's occupation, is assigned as another strong factor for early leaving. Manufacturing and domestic and personal service are occupations of the fathers of the commercial students in larger proportions, while the better-paid callings of the professions and trade characterize the occupations of the fathers of the academic group.

The comparative degrees of mental ability between the commercial and academic groups was the subject of some study.¹

"More than two thirds (69 per cent) of the total academic group (342), as compared with two fifths (42.6 per cent) of the commercial students (576), received a medium grade of 'A' and 'B' in all their courses. Since proficiency in English is a requisite for both the academic and commercial students, comparison of their relative standing in this common subject seemed to be a fair basis for consideration; almost two thirds (64.3 per cent) of the academic students, again, and but two fifths of the commercial girls were ranked as 'A' and 'B' students in their English courses."

The investigator does not believe that the commercial pupils are necessarily inferior to the academic students, but

¹ Compare the New York Report, page 97.

thinks that the interests and ambitions of the former are different:

"They may feel little interest in Chaucer's poems or in algebra and geometry, yet be most enthusiastic and efficient workers in the affairs of the actual world about them. In fact, the experience of these girls after leaving school proves their possibilities; for almost two thirds (62.9 per cent) of the 310 studied from the schools were earning nine dollars or more, and more than one half of these (54.4 per cent) had been at work less than three years."

The report presents valuable information concerning the relation between the amount of school training and the kind of commercial occupation secured.¹

"The marked relationship between their schooling and their occupations is shown by the fact that 37 (out of 310), or less than one half of the 87 girls who had not graduated from day high schools, were stenographers. Clerks and bookkeepers compose 56.3 per cent of this group who were not high school graduates, showing a large proportion who lack the technical training necessary for stenographic work. Four fifths (80.2 per cent) of the 187 stenographers and 20 of the 21 secretaries had graduated from high school, which illustrates the higher degree of education necessary for these more responsible positions."

"As the amount of schooling affects the nature of the occupation, so the occupation explains the wage. Sixty per cent of the clerical workers, of whom one half were either high school non-graduates or else merely grammar school graduates, received less than the nine dollars minimum wage. That nearly one half (43.9 per cent)

¹ Based on data concerning women employed in business as secretaries, stenographers, bookkeepers, and clerical workers.

of the bookkeepers were also earning less than nine dollars is not surprising when we discover that almost as large a proportion of the bookkeepers as of the clerical workers were not high school graduates. Among stenographers and typists, however, 80.2 per cent of whom were high school graduates, only one third received less than nine dollars."

Information of importance concerning business demands and the relation of school training to them appears in this chapter. In the case of office service, the investigator finds that the chief business needs are personality and technique. Personality is fundamental, as it is the initial test to which the girl applying for a position is put. Students inherently lacking personality should be directed, through vocational guidance, to some other occupation. Technique is best secured through part-time arrangements with business houses.

"Vocational guidance and part-time schooling, therefore, are two important aids to the efficiency of commercial education, the one dealing primarily with personality, the other with technique and applied theory."

Attention is called to the fact that many girls have latent possibilities in the matter of personality. Lack of information, failure of the home to supply proper inspiration, general unfortunate environment, may retard promising girls in attaining success.

"Personal information about the child's home conditions as well as about the neighborhood would help to throw light on her needs. The girl's birthplace, as well as that of her father, in the case of the foreign born, is an indication of her general familiarity with our language and customs. The father's occupation also provides another valuable source of information, which might be systematically recorded and studied, of the girl's personal needs."

Regarding the teaching of technique, the report gives this counsel in addition to the recommendation for part-time training:

“In the specific training in stenography and type-writing which has been chiefly emphasized, the schools seem to be satisfactory. But the constantly changing conditions caused by the introduction of new office appliances must be carefully followed by organizers of school curricula. For instance, the number of book-keepers is diminishing. Billing machines, adding machines, and typewriters are displacing many book-keepers in large offices by a smaller number of machine operators.”

The report discusses the effect of the elective system¹ on commercial preparation. Unless intelligent counsel is given, pupils often emerge with improper equipment. There is likely to be an over-balance of either technical work or general training. Particularly is general training liable to be neglected. Records of successful women in office positions emphasize the importance of general training. For many girls an advantageous course to pursue is to complete a general amount of general training preliminary to specialized work. Girls who have completed a general high school course before taking specialized commercial work are shown to be well equipped for more responsible and remunerative positions. There is uniformly found a constant ratio between the total amount of schooling and subsequent business success.

For making commercial work more vital and comprehensible, the report offers the following advice:

“The constant contact with the business world, which part-time or coöperative schooling offers, is just what is needed, therefore, to tie up the schools with actual busi-

¹ See Chapter III, page 40.

ness demands. Teachers with business experience will be absolutely required, and more careful training in office practice will inevitably result. The example of a well-known business college might well offer suggestions for adaptations. This school has a course in office practice which consists in demonstrations of right and wrong office methods. The course presents the office force and employer in typical situations which may arise, from the first application for a position to a sudden emergency where the stenographer's ability to anticipate her employer's wants saves a trying situation. Such a course is not practicable in most schools, but, at least, it shows a recognition of the need of familiarizing the pupils with office conditions. To attain the same end, the administrative work of the head of the commercial course might be conducted in an office fitted with all office appliances, and the pupils might take turns in having charge of this office and acting as the master's clerical assistants. One school has all its notices typewritten or multigraphed by commercial pupils, who also do much of the clerical work for the evening school which is held in the same building."

Valuable suggestion and information is to be found in the chapter entitled "Summary and Outlook." Attention is called to the fact that office service employs more than five hundred thousand women in the United States, and that this occupation ranks among the foremost for women in its opportunities for advancement and superior working conditions.

"One third of the one million and a half workers in 1910 were women, and one of its three divisions, stenography and typewriting, was practically and is increasingly monopolized by women, who constituted more than four fifths the total number. The wage scale is much higher than that of the better industries and of

the other great commercial occupation, salesmanship. Only one sixth of the 1177 women studied through a local canvass of offices earned less than \$8, and the average wage for the entire group was \$11.01. Nor is the wage in office service greatly reduced as in most other occupations; for holidays, vacations, and absences on account of illness were paid for in the great majority of cases. It has been found that the nominal and actual earnings of the clerical worker were more nearly identical than in any of the six large women-employing occupations. Moreover, hours were shorter and the physical conditions of work better for the majority than in most lines of work."

The suggestions most important to the commercial educator may be summarized as follows:

1. Recognition and application of the fundamental principles of vocational education, such as acquaintance with business demands and the trend of development; knowledge of capacities and possibilities of prospective workers; placement by means of close connection with worker and employer.

2. The concrete advantages of extended education should be made clear to all parents and children; all who possibly can do it should be urged to take a four-year high school course. A fifth year intensive course of purely technical training should be developed to meet the needs of the comparatively large proportion who now go to private business colleges for additional specialized training.

3. Intensified commercial courses at the beginning of the high school period are of very questionable value in the light of the facts regarding wages brought out in the report.

4. Part-time schooling in training for office service is recommended, so that the prospective worker may be initiated gradually into the business world. School courses will have a significance possible under no other plan; also op-

portunities for placement of pupils will be opened and a situation of coöperation and intelligent understanding brought about between employer and teacher.

5. Teachers should keep in close touch with business men and offices, since office service is in a state of transition due to the growth of the large office and the improved methods of office administration, and to the introduction of time and labor saving machinery.

The report urges the business man to do his share in bringing about improved methods of training for office service. He is asked to aid the educator in formulating standards for young commercial employees; these standards should cover educational, technical, and personal requirements. The business man should coöperate with the educator by means of talks to teachers and pupils, and by furnishing opportunities for part-time experience in business houses, together with assistance in the problem of proper placing of school graduates.

THE BOSTON CHAMBER OF COMMERCE INVESTIGATION

Some of the main conclusions of the investigation conducted by the Boston Chamber of Commerce¹ will be considered next. The method used in the investigation is quite similar to that adopted in the study presented above, and consists of an examination of the products of the school system rather than an investigation of the resources, methods, and organization of the schools. The vocational histories of a considerable number of men and women actually employed in Boston business houses were studied and were made the basis for the conclusions of the report. Care was taken that material furnished to the investigator should be considered confidential. No one was expected to sign his name to his vocational history, or to furnish any clue as to his identity or place of employment. In spite of these

¹ See page 53.

assurances, however, many business men were unwilling to allow employees to furnish the material desired. By means of a wide canvass, a sufficient number of responses was secured to form probable conclusions.

The number of vocational histories received and classified was eleven hundred and sixty-five (1165), men and women. The report deals primarily with the facts concerning the status of men in business, while figures regarding women appear in a less degree. The report disclaims any intention to be dogmatic, because the returns are too few, but does affirm that the material collected is of sufficient weight to indicate significant tendencies.

Before discussing the statistical parts of the report it will be helpful to state something of the general point of view possessed by the investigator. This general attitude is well illustrated in the comparison made between business organizations and schools, a comparison pointing out the essential differences characterizing the procedure of each.

“Successful modern business is built upon an accounting system that compels the manufacturer and the merchant to know the cost and the return on every form of activity undertaken in the business. The day when the business man could rest satisfied, year in and year out, if only his net results were shown by an annual inventory to be on the right side, has long passed. Any losing venture is soon detected and is either reorganized or dropped from the business.”

“Our educational enterprises, although they involve great business problems, have never been forced by the exigencies of competition to establish themselves upon a solid accounting basis. Such a foundation is less easy in school matters than in ordinary commercial affairs. The raw material of the public school is furnished to the teaching staff with no opportunity of choice. Every boy or girl who applies must be given his place and

must be worked upon by the school machinery. No mercantile establishment would attempt to give a uniform output from such a crude, unselected material. Moreover, the product of the school goes out into business or professional life, and no report can be required by the school, by which the success or failure of its manufacturing process may be fully checked or even approximately ascertained."

A statistical inquiry into the wages paid to different classes of men commercial workers throws some light upon monetary rewards received. The much discussed question of whether or not stenography is a desirable vocation for boys to undertake is treated, and the path of progress in business, whether through the clerical or competitive avenues, is roughly indicated.

COMPARISON OF THE EARNING POWER OF MEN IN BUSINESS
BY AVERAGE ONLY — MEN ¹

YEARS WORKED	Over 20 yrs.	15-20	10-15	5-10	Under 5
Clerical Workers	\$29.84	\$24.55	\$22.21	\$17.01	\$11.80
Stenographers	25.00	24.32	18.00	16.66	12.16
Non-clerical Workers . . .	34.09	25.35	19.64	17.03	11.95
Salesmen	30.91	23.39	20.90	17.41	11.97

Following the above table are four other tables giving tabulations of the same individuals, using successively the highest wages received, the lowest wages only, the mode only, and the median only. From the tables presented the investigator makes the following deductions:²

"During the first five years of service the men who are stenographers earn a little better average pay than

¹ Boston Chamber of Commerce Report, page 8.

² Boston Chamber of Commerce Report, page 8.

any of the other groups of men. Gradually, however, the men who can adapt themselves to other than stenographic positions gain the higher rewards."

"Stenographers apparently do not reach the highest prizes in business, at least, so long as they continue to be stenographers."

"Stenographers have a decided advantage over untrained men and keep well above the minimum wage for every period of this service."

"It is evident that the larger number of clerical workers reach their maximum by the end of their fifth year of service. They are better off in earning power than are the majority of non-clerical workers up to the period of fifteen to twenty years of service. At this point an equal number of men earn more pay than do the clerical workers and this advantage is held throughout the balance of the working life."

"Clerical workers are, perhaps, most sure to earn a comfortable wage, but in the long run the higher pay will be most sure of being reached through the non-clerical side of the business. An analysis of the individual cases which make up the higher paid positions among non-clerical workers shows that these men are either buyers or executives and that they have reached their present positions after a service as salesmen."

A similar study applied to women brought out markedly different results:

"A glance at our comparison, by average only, shows that stenography is by a considerable margin the most profitable field for the young woman. During the first five-year period, the selling force offers the next best chance. . . . This analysis emphasizes the advantage of the stenographer over any other woman worker in the earlier years, and also shows that the selling force

offers a better chance to the girl who does not know stenography than does any other branch of clerical work."

In a study of transfers from clerical to non-clerical positions is brought out the fact that transfers of this nature are unusual.¹ Of a total number of 1165 reports, only 52, or 4.5 per cent, had been so transferred, of whom 43 were transferred from the office to the competitive side of the business and 39 reported advantage to themselves by the change.

"If these figures are a fair indication of what is going on in our business life, it is clear that the principal line of advance to any employee must be in the department in which he starts. Few will ever have an opportunity to change. The need of a broader training for the competitive side of the business — where the big prizes lie — and some careful instruction by which the pupil may learn the opportunities and necessary qualification for actual business, is clearly indicated by this study."²

The report also presents some elaborate tables upon the relation of earning power to total amount of schooling and specialized forms of training. The conclusions are quite similar to those of the first study presented in this chapter.³ Four years of high school training shows a real advantage in a higher minimum wage, a higher maximum wage, and a higher average. In the study of the wages of women in this report it was found that private school training (business college) added to three or four years of high school, gave the highest earning power in the group.

A study was made of school subjects used in business life.

¹ New York Report, page 112.

² Boston Chamber of Commerce Report, page 11.

³ See page 60.

Employees were asked to state which of the following subjects had been of business use to them:

- A. Stenography
- B. Typewriting
- C. Bookkeeping
- D. Penmanship
- E. Mental Arithmetic
- F. Any other school study.

Affirmative replies appear as listed below:

- A. Stenography = 221
- B. Typewriting = 357
- C. Bookkeeping = 446
- D. Penmanship = 675
- E. Mental Arithmetic = 664
- F. Any other school study (scattering) = 154¹

Although 221 persons report having used stenography, only 86 (68 women and 18 men) report themselves as stenographers. The investigator infers that the higher grade of clerical help have begun work as stenographers and have subsequently become office managers and book workers. Since penmanship and mental arithmetic appear largest in the list, the commercial value of these two subjects is emphasized. Regarding the importance of stenography, the investigator has this to say:

“The possibilities offered by a knowledge of stenography seem to hold a prominent place in this group of answers. Evidently, to many of the workers, the life of the stenographer seems to open up positions of value.”

A section of the report now under review is devoted to a study of returns from employers. The investigator, how-

¹Twenty-four different subjects, of which Business English heads the list with thirty-seven replies.

ever, was unable to secure a group sufficiently large to furnish a basis for conclusive generalizations. The opinions of business men regarding the efficiency of commercial courses were secured through personal interview. In all, 139 business employers were interviewed and their answers to various queries tabulated.¹ In answer to the question, "What education beyond the grammar grade seems to you valuable?" we have the following results:

Total number of reports — 139

No education beyond grammar school desired.....	22 or 15.8 per cent
More education, but not defined	85 or 61.2 per cent
Definite demand for higher training	18 or 13 per cent
No opinion expressed	14 or 10 per cent

It was apparent to the investigator that many business men know very little about the different kinds of commercial courses available in their own city.

As to answers to the question, "What are the better paying positions in your business?" the following tabulation is of interest.

125 responses

Buyers and salesmen.....	87 or 69.6 per cent
Department heads and managers .	21 or 16.8 per cent
Office positions	17 or 13.6 per cent

The value of stenography as a means of securing promotion to the better paid positions is answered as follows:

	For Boys	For Girls
No value	65	44
Slight value	10	7
Real value	41	66
No opinion	23	22
	<u>139</u>	<u>139</u>

Concerning the employer's attitude toward defects in school training, it is interesting to note that the main criti-

¹ See Appendix, page 185.

cism is directed toward deficiencies in the three R's. There were forty-six who made this complaint, and only five who found objections to the results obtained in stenography. Many employers mention defects in moral and personal qualities, and counsel the schools to pay more attention to the development of business character. A similar condition was found in the investigation first treated in this chapter.¹ That business men as a class do not seriously concern themselves about the character of commercial training is well illustrated in the report just presented in outline. In the several other similar investigations the same situation is evident.²

MASSACHUSETTS STATE BOARD OF EDUCATION
INVESTIGATION

The third investigation with which this chapter deals was made by a sub-committee of three commercial teachers acting for a larger committee of commercial teachers selected from the entire state of Massachusetts. The chairman of the sub-committee, Mr. Maynard Maxim of Newton, has prepared a brief summary of the most important conclusions for this volume.³

“One line of investigation carried out by the committee concerned the actual business experience of high school graduates. Its object was to show the character of the positions secured by pupils upon graduation, the prospects for advancement, the wages earned, etc.”

“Questions covering these points were answered by nearly five hundred graduates of high schools in Boston, Beverly, Dorchester, Malden, Newton, Springfield, and Westfield.”

¹ See pages 60, 61.

² See page 137; also Appendix, pages 155-158.

³ Mr. Maxim's complete report was not available in time to permit of larger use in connection with this volume. The complete report will appear as a Massachusetts State Document.

"Practically all of the 203 girls who reported were engaged in clerical and general office work, including stenography and typewriting. Of the 278 boys who made returns, but 16 classified their work as that of salesmen. Fifty-eight were doing stenography and typewriting, while the remainder described their work as 'clerical,' 'bookkeeping,' and 'general office work.' Their average salaries appear in the following table:

AVERAGE WEEKLY WAGE DURING FIRST YEAR AFTER LEAVING SCHOOL,
COUNTING ONLY THE TIME WHEN EMPLOYED

	Boys	Girls
Weekly wage at the beginning of first year	\$7.72	\$7.75
Weekly wage at the beginning of second year	10.12	9.23
Weekly wage at the beginning of third year	12.77	10.73
Weekly wage at the beginning of fourth year	15.62	12.14
Weekly wage at the beginning of fifth year	18.66	13.18

"In reply to the question: 'From your own experience do you consider shorthand and typewriting worth a boy's while in school for their subsequent value in furnishing remunerative employment?' 206 boys stated their belief that stenography and typewriting would be of advantage, while 57 replied negatively."

"In reply to the question: 'From your own experience and observation, would you advise that a boy try to get into the better-paid positions through office employment or by way of the selling force?' 142 boys answered 'sales force,' and 116 gave their preference to office employment."

"Inasmuch as the great majority of these boys had been out of school but five years or less, their answers were probably based on opinion rather than on personal experience."

"It is hard to account for the fact that so few of these boys hold positions as salesmen, unless we assume that promotions to this line of work are withheld in the

case of boys of high school age until they have had a longer period of apprenticeship than the investigation covered."

"The average salary of the sixteen boys who classified themselves as salesmen is considerably higher than the average of the whole, being \$8.17, \$11.20, \$15.10, \$20.64, \$24.50, for the respective years of the foregoing table."

"It is likewise difficult to account for the great majority of boys in favor of learning shorthand and typewriting when so few are actually using it in their work. Without doubt, the ability to render efficient service as a stenographer, when first gaining employment, brings a boy into closer contact with the men 'higher up' than general office and stock room work. The subjects must be thoroughly mastered, however, for a half-trained boy stenographer is of no more practical value to a firm than a similarly inefficient girl. As a profession for men, stenography offers boys few opportunities. As a stepping-stone for a boy seeking promotion, stenography, with typewriting, may have considerable value; but the time required for its mastery consumes so large a part of the final years of a high school course as to make it of doubtful expediency."

CONCLUSIONS TO BE DRAWN FROM THE RESULTS OF THE THREE INVESTIGATIONS

From the foregoing investigations several important conclusions are evident, showing that both the school and organized business need to make adjustments and to incorporate changes looking towards improvement.

1. The schools need to adjust courses and methods to correspond more closely to business practice. This means that most school commercial courses should be modernized to meet the new standards established by large organization

and specialization of occupation. Our bookkeeping courses at present are taught largely on the supposition that boys and girls will occupy positions as head accountants. In view of the kind of service demanded, it will be manifestly wiser to train pupils, by giving due attention to skill, speed, and accuracy, in the unit processes in which the student will find business openings. New equipment in the way of special machines, such as adding machines, billing machines, card filing devices, and the like must be added to our present meager furnishings.

2. The schools must attempt and achieve more in the way of developing the personal qualities needed for successful participation in business. It is apparent that business men assign great importance to personal qualities, even more than to efficiency in technique. Our schools have always sought to develop the moral qualities of their pupils, but in addition to this, commercial schools should try to develop the personal qualities of pupils with a specific view to their business importance. We should make this training concrete, showing the relation between personal qualities and success in business. Pupils who lack fortunate examples in their home environment should find in the school the specific information and models needed for inspiration and imitation. The schools should feel as much concern for the success of their graduates in their personal relations in business as for the quality of their technical instruction.

3. Part-time and coöperative plans will probably furnish the only adequate method of guaranteeing the achievement of satisfactory results in producing more competent commercial graduates. By such methods only can the pupil be checked, judged, and improved while under training. This plan renders it possible to measure practice against theory. No form of applied education has been able to succeed without the adoption of the plan of testing the neophyte in the practical operations of his art, and of criticising and correcting mistakes which could not be foreseen in purely theoretical training. The coöperation and understanding of

business men are also important advantages to be gained by the adoption of part-time and coöperative plans of commercial training.

4. Guidance, placement, and follow-up work are essential features of a well-ordered, comprehensive, and effective plan of commercial training. Pupils are not at present guided to suitable commercial positions or placed in them. Much waste, discouragement, and failure are assignable to this condition. At the present time, our schools are not furnished with the resources, funds, and expert service necessary to undertake these additional functions; but communities seeking to increase substantially the efficiency of applied education must soon recognize and meet the deficiency.

5. Commercial education must expand its scope to include training for commercial occupations other than clerical. The above investigations indicate that while stenography is the best paid commercial vocation for a girl, for a boy salesmanship is better than all other commercial occupations. Merchandizing or competitive functions of business for boys offer the best opportunities, because stenography is a rapidly disappearing occupation for men. Commercial courses, consequently, must be recast to furnish training for commercial opportunities discoverable in actual business.

6. Business men must do more than find fault with the schools. They must participate in the training process. We hear much of the criticisms of business men on the schools, and school teachers have encouraged full expressions of opinions. It is important now that business men should aid the schools in the honest and serious effort to better their work. The schools invite and seek coöperation; school directors are apparently more eager to do their share than are business men. Our varied social and industrial institutions are passing beyond the period of individualism. Business is no longer merely business, nor are schools mere educational institutions. The inter-connections which characterize all the more perfect organisms are taking form

throughout our social structure; our schools must become in part business, and business must become in part schools.

Reference should be made in this chapter to those conclusions and positions appearing in this book, particularly in the chapter presenting the New York Report,¹ which the material in the above reviewed investigations does not strictly support.

The positions in the New York Report were taken chiefly on the assumption of a working hypothesis supported mainly by such general studies as were possible in view of the limitations of time and resources; these positions were not stated as certain, but urged as probable in the light of available evidence. Attention should be called to the fact that the New York Report urged immediate and further investigations, on the ground that the prime need of commercial education is competent evidence upon which to base its procedure. Further evidence is now beginning to appear in the various investigations recently undertaken, instances of which this chapter presents.

It is recognizable that the classification of commercial occupations as "enervating" and "energizing," and the assumption that clerical occupations come under the first caption and competitive callings come under the second, has in it more of error than of truth. The investigations presented in this chapter show that clerical and competitive commercial occupations both present situations where one may find either business success or failure. It would be more accurate to state that clerical and competitive functions of business have within their respective fields opportunities for satisfactory advance as well as dangers of "dead-end jobs." For girls, at least, stenography, which is a clerical occupation, presents the best economic reward and in many ways the most desirable conditions of employment.

The reasons assigned in the New York Report² for the

¹ Chapter VI, page 130.

² See Chapter VI, page 131.

poorer quality of commercial pupils found in high schools are probably untenable; at least, other factors are stronger in the selective process than the failure of commercial education to conceive its function on a broader plane.

The report of the Women's Educational and Industrial Union¹ would indicate that the economic status of the parents is a strong factor; so also is the ambition and ability of the child to go to college, as well as the general social attitude toward desirable means of preparing for livelihood. Thus it was found that the economically most favored district high school in Boston has but fifty per cent of its pupils enrolled in commercial courses, whereas less fortunate sections of the city showed a proportion as high as ninety per cent of commercial pupils.

It may be fairly claimed, however, that the investigations of this chapter confirm rather than refute the main positions taken throughout the volume. We shall need, of course, more study of all the questions with which this volume deals, and of other problems besides. The time has probably come when state and national authorities should undertake and carry on further inquiries. No subject within the range of secondary public instruction has larger interests or involves more pupils and more extensive investment of public money, than commercial education. In our efforts to bring about more effective educational achievements, it is important that our already established courses attempting commercial education should receive the advantage of expert advice similar to that available for the newer school endeavors represented by our recently founded industrial and trade schools.

¹ See page 55.

CHAPTER V

CONSTRUCTIVE PROPOSALS

THE new commercial courses to be established must proceed primarily from the objective conditions of commerce, in so far as they are discernible and significant, and from the reasonable possibilities and legitimate aspirations of boys and girls; only secondarily must they proceed from those influences which we now fancy are school necessities. The form and content of vocational education must be drawn from the vocation, while the determination of particular methods may remain with the school teachers as heretofore. Without restricting its appropriate functions, the school under this procedure will render better service to society; for the newer and better ideal of social betterment is that of service, not of domination.

THE RANGE OF COMMERCIAL EDUCATION

Commercial education in the future cannot be limited to the preparation for a few commercial vocations, such as bookkeeping and stenography, but must expand to include preparation for a wide range of different activities, as wide perhaps as the entire range of occupations in commerce; and very likely even within the different occupations for subdivisions of higher or lower degree.¹ Industrial education is adopting a policy of founding unit courses corresponding to the specialized organization of industry. There is much suggestion in this practice for commercial educa-

¹ An analysis of the division of work existing in a large retail house in Boston revealed two hundred different kinds of jobs, or unit occupations, in which one or more individuals were employed.

tion. Commerce, like industry, has a wide range of occupations for one of which each normal boy or girl may receive training. What the unit courses in commercial education may prove to be must be determined by investigation and experiment. Some suggestions upon the matter are given in the chapter upon investigations (page 58).

We are beginning in progressive states (e.g., Massachusetts, Ohio, New York, Wisconsin) a program of educational expansion toward the improvement of young people already employed.¹ Commercial education has a large and proper function in continuation schools. A considerable number of continuation school pupils will need commercial education in some form. If we divorce our regular day school commercial work from that adopted for continuation schools, we shall build up a water-tight compartment system which will result in a needless duplication of machinery and effort. If commercial education were to remain static, a newer and better plan for continuation schools would obviously be necessary; but an adequate and improved plan for day schools should be developed which will be comprehensive and efficient enough for many continuation school needs. A suggestive example of sound organization is seen in the city of Leipzig, where the whole compass of commercial education is found in one organization. The same director, corps of teachers, plant, and equipment constitute the educational resources in that city for commercial education of all grades. Many types of commercial instruction are necessarily maintained. In the same institution are found the boy who leaves school at the earliest legal age and the boy who persists a year or two longer; here is maintained the school corresponding to our commercial high schools, and students of university grade are under the same director and are taught in part by instructors who conduct courses in the lower schools.

This system is sound financially and sound educationally.

¹ Compulsory Continuation Schools.

By means of one plant all the educational needs are met with a minimum of cost, for there is no idle machinery and no duplication of equipment. From an educational aspect the plan is commendable in that there is no confusion of policies respecting the treatment of problems. Commercial education under this system is not, as with us, one thing in day schools, another in evening schools, and something entirely foreign in continuation schools. In our large cities we need to coördinate and unify our various educational agencies dealing with the problem of commercial education (page 151).

Logically, then, the organization, equipment, and teaching force of day high schools should be made available for that part of continuation work needed by junior commercial employees. This connection will prove mutually advantageous: to the continuation school by providing adequate facilities at a minimum cost, and to the regular school by giving opportunity to deal directly with actual commercial needs. The consideration of cost to communities will prove a particularly substantial argument, for the financial burden of education now borne cannot be greatly increased for desirable educational extensions without undue sacrifice.

We have argued throughout this volume that commercial education should become truly vocational, and a definition of principles has been given (page 132). Of these principles, that of having opportunity for practice under actual conditions is of more than ordinary importance. Indeed, an opportunity for practical work is probably the prime essential in all kinds of vocational education. The medical student has hospital practice; the normal school pupil is given practice teaching; the trade school student works in a school shop, which commonly turns out a product sold under competitive terms in an open market, or else works part time in an actual shop under real conditions. Theoretical training attempted as preparation for any definite end without full opportunity for practice has proved unprofitable. Nearly all vocational education in the past was originally

instituted with little opportunity for practical participation in activities which were real; and all these attempts have gone through an evolution which ended in a condition where the missing essential was supplied. Many of our scholastic enterprises, not vocational, but seeking to instruct in objective facts, have gone through a similar evolution. We formerly taught physics and chemistry out of textbooks only. Now we take the pupil into the laboratory and strive to have him acquire his knowledge firsthand, by the experimental method, as we term it.

VOCATIONAL PRACTICE IN COMMERCIAL EDUCATION

Commercial education has had its laboratory of actual practice, commonly in the form of the model office. Textbooks made up largely of practical problems have furnished material of substantial and practical value to the student preparing for clerical occupations in commerce. Furthermore, these devices have been the only forms available for vocational practice feasible for use under conditions that have quite generally prevailed, and in many places they may prove to be devices for clerical education which must be relied upon for some time to come. But obviously these devices lack reality, no matter how carefully they may be maintained; they are at the best a makeshift and cannot compete in effectiveness with the opportunities which real offices and real problems present. Their limitations are at once apparent when we consider their inadequacy for the practical training of young persons for commercial occupations other than clerical, and, consequently, for a large portion of possible and desirable commercial training they are valueless. We cannot teach salesmanship or store service by means of a model office. We can hardly expect to establish a model store in our schools; the difficulties of simulating business conditions, other than those we now have, for clerical pupils need no extended exposition. Industrial education, confronted with a similar problem, is choosing

a wise and economical solution by seeking to use the factory as the means of opportunity for practice and experience, e.g., in the Beverly and Fitchburg plans. The way out for commercial education is along a similar path, and the business house should furnish the opportunity needed.

If there is established a real and vital connection between the regular high schools and the continuation schools, where the latter are established, we may more easily make progress in securing the business house as the laboratory of commercial experience. The business man may perhaps be led to see a way to coöperate not hitherto recognized. If the business man sends his junior employees for a part of the time to the school, why should not the school send its pupils for a part of the time to the business house? Let us assume a concrete situation. A business house has at certain periods — for example, four hours a week during the working hours — a hundred employees at continuation school; may not the school send a hundred commercial students from its classrooms to take the place of those temporarily at school? There are difficulties to such a plan, no doubt; there will arise questions of compensation, lack of knowledge of store conditions, chances of loss through inexperienced help, and the like; but there are no fundamental obstacles to trying the experiment. It should not be more difficult for the business man to adjust himself to a new situation than for the schoolmaster. Our proposition offers a fair trade: the business man to train the school boy and the schoolmaster to instruct the business employee.

To make such a plan work successfully, changes in the school as well as adjustment in the business house are necessary. Industrial education, in operating a shop and school plan, uses the coöordinator, i.e., an instructor who has had experience in shop practice and has also had experience in the classroom as a teacher. With this double equipment the coöordinator can deal effectively with the twofold situation presented. We shall probably need to adopt a similar procedure in the case of commercial education if we are to

obtain an effective method of bringing the school and the business house together. Where conditions permit, the week-and-week plan characteristic of industrial education should be tried.¹

The matter of arranging high school programs to permit pupils to be absent from school certain periods on particular days undoubtedly presents real difficulties of adjustment. The week-and-week plan — i.e., the Beverly and Fitchburg plan — presents practically no program difficulty. Where absences come at irregular intervals, or even on regular recurring days of the week, the difficulties of program adjustment are more than apparent. For the economical and efficient administration of a high school, regular schedules for teachers and pupils are a necessity. Where part-time pupils pursuing commercial studies are required to be in the stores on certain days, such as Mondays, the difficulty arises concerning the proper provisions for meeting the academic assignments arranged for the day. The schedule for teachers who teach related academic studies in the school may be unwarrantedly disturbed.

The school seeking to establish effective commercial training must face these difficulties. The adoption of the departmental or sub-school organization will be one effective method of meeting program difficulties; by this device only one department is disturbed and program difficulties do not pervade the whole school (page 41). Again, practice work in stores may be sought chiefly on Saturdays or confined to particular seasons of the year, such as the spring or fall. Pupils might work the first half day on Monday and return to the school in the afternoon for a two-hour session, wherein the academic work designed for the morning might be given in condensed form. All these program difficulties will be adjusted in some suitable way if the worth of actual practice work is sufficiently recognized by the schools. If school credits and conventional high school requirements are

¹ Now being undertaken in connection with commercial courses in Cincinnati.

chiefly esteemed, coöperative relations with business houses will appear as secondary in importance, and the difficulties of part-time arrangements will loom so large that nothing so disturbing to the school routine will appear advisable.

Much of the progress toward coöperation between the schools and business will necessarily depend upon the attitude of business men. The routine and orderly procedure of the business house are not less important to the store than similar regularity is to the school. Temporary, untrained, and immature workers in the store threaten the serenity of business managers as much as the unusual conditions mentioned above disturb the school. The business executive has less control of certain business conditions than the school principal has of the program. The seasonable demands of trade arise from the habits of society; due to social custom, Monday has come to be the shopping day; the stores may use additional help to advantage only when need for more workers creates a larger demand. Primarily, the business man must feel the need of better service and greater efficiency in his employees; he must recognize the function of training as a means of securing these qualities and must see in the school the agency for furnishing effective training. He must not look upon the school as a source of profitable exploitation to be used purely as temporary exigencies may suggest. The business man must recognize his duty toward the education of business apprentices. He must make sacrifices similar to those of the schoolmaster and bear his part of the inconvenience and cost of coöperative education.

The greatest difficulty besetting the problem of coöperative education between commercial high schools and business houses will be found in the mental attitudes of the two potentially coöperating agents. Both may admit the abstract proposition that coöperative education is theoretically desirable, but their convictions may be too weak to cause them to study the problem with sufficient seriousness to discover practical plans of coöperation. The business

man may applaud the idea of coöperative education, but maintain that the peculiar conditions of his store prevent him from participation. The school man may give assent and approval to coöperative educational principles, but see insuperable difficulties against adoption because of the wide departure from the customs and practices of his school organization which the plan involves. This situation should not be discouraging, for it is merely normal and has been paralleled often heretofore when progressive movements have been temporarily halted by the disturbing difficulties of new conditions. If coöperative education is educationally sound and economically desirable, the preliminary difficulties of adjustment will be overcome. There will be found some more efficient business men who will be willing to make the venture, and some more enterprising school men who will undertake the experiment. Imitation is easier than experiment, just as settlement is easier than exploration, and the majority of both business men and school men may be expected to follow the path which their more enterprising leaders have prepared.

BOSTON EXPERIMENTS IN COMMERCIAL EDUCATION

The city of Boston has begun to experiment vigorously with possibilities of coöperative commercial education. As previously stated, the Boston High School of Commerce has conducted coöperative work since its beginning in 1906. Since 1913, courses in salesmanship with coöperative features have been established in the Girls' High School and in the Dorchester High School. In January, 1914, a marked extension of coöperative education was undertaken by the school authorities. A director¹ of practice work in salesmanship was appointed to coördinate commercial courses in general high schools throughout the city with practical work in a group of some six or seven coöperating stores.

¹ Mrs. Lucinda W. Prince, formerly director of the school of salesmanship Women's Educational and Industrial Union, Boston.

The new coöperative courses are optional with the schools, but the desire to undertake the experiment is apparently strong. Brighton and East Boston High Schools have established coöperative courses, and the high schools of Roxbury, West Roxbury, Hyde Park, South Boston, and Charlestown are planning to do so with the opening of school in September, 1914. The work of the director of practice is an important feature in the hoped-for success of the undertaking. Unbearable confusion to business managers would be the result if each individual school sought to arrange practice periods with the stores. The director of practice learns the possibilities of practice in the different stores, and is at the same time familiar with the general conditions of the schools. Thus she is able to coördinate the work between the store and the school so that the minimum confusion may result. The director of practice has authority also to deal with the technical salesmanship courses attempted in the schools, has supervisory functions over the teachers of salesmanship, and possesses familiarity with the moral, physical, and business conditions of the store where the pupils are sent. She brings to the store the knowledge of the limitations and possibilities of the school, and to the school the demands and difficulties of the store.

The above plan is designed to bring about effective methods of teaching salesmanship. Girls in high school are almost exclusively concerned with the experiment. The High School of Commerce, attended only by boys, operates a plan of longer duration, designed to meet the different conditions which boys find in business. The Dorchester High School is developing a plan for coöperative work in connection with clerical commercial education, and the Charlestown High School proposes to make the same venture, beginning in September, 1914. It is interesting to note that the present general adoption in Boston of seemingly radical methods in commercial education has not been brought about by compulsion on the part of school authorities, but rather by invitation to participate in an experimen-

tal educational project. Considerable freedom regarding the character of the courses is allowed. One desirable requirement is made, viz., that teachers of salesmanship shall be those duly qualified by business experience and training to give the technical instruction.

At the present time, no careful attempt is made to relate the general instruction to salesmanship. The suggestive programs presented below may be analyzed roughly as made up of general unrelated academic work, such as English and modern languages; related technical work, such as commercial geography, economics, and textiles; and purely technical or vocational work, such as shorthand, bookkeeping, and salesmanship. It is believed that experience will show that the courses should be conceived and administered as related academic and technical subjects, and purely technical work.

PROGRAM OF THE EAST BOSTON HIGH SCHOOL ¹

The work in the first, second, and third years includes subjects already established in the school, e.g., English, a foreign language, commercial geography, industrial history, drawing, and manual training. Stenography and typewriting may be elected in place of a foreign language during the third and fourth years.

Fourth year.	Salesmanship, Store Practice, etc.	3 points ²
	Textiles	2 points ²
	Color and Design	1 point ²

PROGRAM OF THE WEST ROXBURY HIGH SCHOOL ³

Pupils may select from elective program (English required) subjects totalling in points not less than 20.

¹ Abridged to show incorporation of Salesmanship.

² Twenty points are required for a full year's work.

³ Abridged to show incorporation of Salesmanship.

Second year.	Commercial Geography and Industrial History	3 or 4 points
Third year.	Textiles, including Color and Design	3 or 4 points
Fourth year.	Merchandise and Salesmanship	3 or 4 points

PROGRAM OF THE DORCHESTER HIGH SCHOOL

SHOWING OFFERING IN THE FOURTH YEAR FOR VARIOUS COMMERCIAL NEEDS

FOURTH YEAR

<i>Required</i>	<i>Elective (choose one)</i>
English 3 points	Economics 4 points
Modern Language . . . 3 or 4 points	Physics (for boys) 3 points
Phonography and Type-writing 6 or 4 points	Chemistry 4 points
Commercial Law or Textiles (for girls in Salesmanship)	Drawing 3 points
	Bookkeeping 4 points
	Salesmanship ¹
	(Wholesale, boys) 4 points
	Salesmanship ¹
	(Retail, girls) 4 points

¹ Pupils may elect salesmanship subject to approval of teacher in charge.

The programs might be criticised as attempting simultaneously to prepare for several commercial occupations. In fact, three distinct commercial occupations are aimed at in the programs; namely, bookkeeping, stenography, and salesmanship. In view of the fact that the schools concerned are general high schools conducted upon the elective system, the proposed courses represent a progressive step. Salesmanship as a competing commercial opportunity with clerical callings has not, in the pupil's mind, at least, fully demonstrated its value. There is much excuse at the present time for the pupil to insure his chances for a market for his talents by securing training in more than one outlet of commerce. Honest experiment with fair competition of various commercial opportunities, accompanied by careful tests of results, will eventually show where vocational opportunities lie. The more definite provision for the depart-

mental organization of commercial courses, or sub-school plan, may likewise prove to be a natural consequence of the quest to attain more efficient results (page 41).

SPECIAL PROBLEMS IN THE ESTABLISHMENT OF COMMERCIAL SCHOOLS AND COURSES

Considerable discussion has been given of the possibility of the general high school so organizing its resources that effective courses in commercial education might be the result. As before indicated, the general high school will be called upon for large service in this problem of improved commercial education. Many larger communities will choose to effect the same end by the establishment of special high schools of commerce. Already there has been a considerable development of the special institution in our larger cities (pages 4, 5). The special school which begins *de novo* has not many of the difficulties to overcome that confront the general high school; but even there substantial advance and sound achievement will be the result only of extreme care, favoring conditions, and judicious procedure. In the first place, the special schools usually become over-large and are unwieldy at the start, before the real vocational problems are comprehended. Effort and attention are centered upon the mere problem of housing pupils, of making essential provisions for securing teachers, and of furnishing supplies.

The matter of finding competent teachers has many real difficulties. Available candidates with satisfactory experience invariably must be found in other high schools of different character and purpose. Very few normal schools or higher schools of education are training special teachers for commercial schools. The special school will be obliged to give its teachers a new point of view if it is to achieve an adequate realization of its purpose. Communities are prone to mistake a fine building with a pretentious name for an educational idea. We have made the error in this country

of trying to create our special schools in ready-made fashion. We first construct an elaborate building to gratify local pride by appeals to the eye; we select our teachers from the local corps with no adequate notion of fitness for special work; and we transfer our pupils to the new building *en masse* without careful selection on the basis of vocational fitness. We Americans believe in "going concerns" at the start, whether our projects be educational, social, or industrial; we are too impatient to wait for experimental or evolutionary processes to show us the valuable types from which to choose and subsequently to expand. We believe that bigness is success, that smallness is failure. This mental viewpoint is the cause of much waste and disastrous change in our educational policies. The time-honored adage that "haste makes waste" has not given us caution in educational enterprises.

A community seeking to establish an effective special commercial school will do well to begin modestly. First and foremost, a principal should be selected who possesses knowledge of the special problem, broad sympathies, and qualities of leadership. Heads of departments who are effective executives with the power of interpreting significant needs, demands, and conditions of business should then be chosen, and teachers of training and adaptability should be added to constitute a minimum beginning organization. A fine building, an expensive equipment, a large number of pupils, may easily create an initial condition which has in it far more of danger than of promise. Having established the new school on the basis of a minimum working force and equipment, it will next be highly important for those commissioned to carry on the work to study the problem of trying to make the special school meet effectively the objective demands of business.

The expansion of a useful type of school is a comparatively simple matter, but the useful type is difficult to find. If the expansion is not too rapid, teachers may be selected on the basis of special fitness for the particular problem at-

tempted. There is always danger of too rapid growth, where usually the effort of all concerned becomes centered on mere housing. In many of our large cities, the school authorities are triumphant over the fact that a seat has been found for every high school pupil who has applied for accommodations; conditions for effective work are oftentimes not seriously considered. The special commercial school may attract hordes of children who are appealed to by the mere novelty of the name or by the publicity which new school ventures secure from the press. It would be a useful experiment for our large cities to found a model high school, as is done often in the case of elementary schools, where young teachers in training may have fruitful conditions of practice, and where teachers in other high schools may visit to see work of superior merit in operation.

The special commercial high school, or the specialized department of commercial training of a general high school, is confronted today with the choice of one of two divergent educational principles. These issues were presented in sharp contrast at the 1914 meeting of the National Educational Association Superintendents' Convention at Richmond.¹ Our public school systems, in embarking upon the policy of expansion to include training for industrial and commercial vocations, will not achieve immediate and effective results unless fundamental differences between liberal and vocational education are recognized. Liberal education enables us to appreciate and consume, while vocational education aims to train primarily effective producers. The two forms of education may be attempted simultaneously, but neither will be largely effective unless the function of each is kept distinct in the minds of teacher and pupil. The comparatively slight modifications of general high schools to effect what is called a general vocational education will not succeed in meeting the social and vocational needs of pupils. Indeed, these modifications may cause harm, because the real

¹ In the papers presented by David Snedden, Commissioner of Education, Massachusetts, and by W. C. Bagley, University of Illinois.

liberal features of the course may be disturbed with no compensating advantage in the way of specific vocational preparation. There do not exist today, among the occupations which the pupils enter, callings that may be termed general occupations; hence a general vocational training aims at nothing which has an objective reality.

A better and surer plan of guaranteeing worthy liberal and vocational education may be to attempt them successively. None will dispute the value of the ideal of founding every individual's education upon as liberal a basis as possible; but, in addition, our present need is to equip our future citizens with a vocational training to enable them to attain effective and satisfying participation in the various life vocations. Our effective medical and law schools demand for entrance a broad background of liberal training, but they confine their own instruction to strictly vocational work. The period at which actual vocational work should begin depends primarily upon the individual. The mental capacities, the economic circumstances, the social environment, will cause some to seek vocational education as early as fourteen, and others as late as twenty-one or twenty-two. At whatever age the individual presents himself for vocational training, he must meet primarily the methods, environment, and procedure of the vocation sought. The period of liberal training is over when he commits himself to vocational training, or as long as he follows that path.¹

The above position, strictly interpreted, is probably too radical for immediate adoption as a widespread educational policy. The chief objection to it is the restriction of freedom to the individual. As a nation, we believe in freedom to change our life plans if opportunity and inclination prompt us to do so. For immediate purposes we are concerned in discussing effective plans for improved commercial education. As before indicated (page 19), commercial education for purely vocational purposes demands more of

¹ This position presents broadly the position taken at the Richmond meeting by Dr. David Snedden (page 88), with whom the author agrees.

liberal culture than other vocations attempted in the secondary school period. But every commercial course, whether that of one year's duration or that of four, should have an intensified period, immediately before the student expects to go into commerce, where the aim, methods, and experiences are primarily, and perhaps almost exclusively, those of the business environment into which the student will shortly be sent. Where students may look forward to four years of secondary instruction as preparatory to entering business, the first year might be primarily liberal, the second and third years primarily pre-vocational, and the fourth year primarily, or preferably wholly, vocational.¹ For those who drop out of the course through accident or choice, the continuation school or evening school should give the opportunity for intensified vocational work which was lost by early leaving. The shorter term commercial courses may be arranged with the same relative proportions of liberal and vocational studies indicated in the case of the four-years course. Investigations presented in Chapter IV indicate that business success as measured by earning capacity bears a very direct relation to total years of schooling (pages 56, 57). There has been a general assumption among educators that a similar relation is found throughout all vocations; but investigations into industrial occupations fail to justify the assumption.² It seems probable from present evidence that short commercial courses, such as those of one or of two years at the close of the elementary school period, will fit immediately for no very promising commercial occupations. These courses are very much worth while, however, if the individuals who have taken them after entering business in the minor capacities open to them, supplement their education by work in continuation or evening schools. The short term business courses are justified for those who, for limiting reasons, are unable to

¹ See New York Report, page 140.

² *Vocations for Women*. Women's Educational and Industrial Union, Boston.

pursue longer courses; but sound vocational advice given to those who pursue them should point out the need of supplementary education, which is manifestly essential for those who would rise to important positions and probably also for those who wish to look forward to even satisfactory wage conditions in business occupations.

COURSES IN THE BOSTON CLERICAL SCHOOL

The plan designed for a new clerical school to be opened in Boston in September, 1914, embodies the principles recommended with regard to the distinction between liberal and vocational training, as well as other procedure commended as proper in the creation of special commercial schools. This special school is designed to round out a system of commercial education which already comprises commercial courses for boys and girls in general high schools and a special high school of commerce for boys. The new school will serve primarily the needs of girls, by offering specialized and intensified training in clerical vocations. Three courses will be offered: first, a course for office service which will be available for girls who have successfully completed two years of high school work, not necessarily commercial in character; second, a course for stenographers and high grade clerks, available for girls who have successfully completed three years of high school work, without designation of kind; third, a course for bookkeepers and accountants, and a course for secretaries, who must be either high school or college graduates. The last course will be offered to both young men and women. The clerical school will attempt no liberal training whatsoever. The applicants for the various courses will come with an academic equipment which presumably constitutes the essential elements of general education necessary for successful entrance into the specialized work in the vocation sought. No specified length of time for the course will be assigned; some students with preliminary commercial training in

other schools may be expected to complete the work in half a year; others of slower rate of achievement may take a year or even longer. The methods to be used are designed to be primarily individual, while the standards of achievement are designed to prepare for successful entrance into the specialized commercial occupations aimed at.

Following are the unit courses of study proposed for the clerical high school of Boston.

“ Course Preparing for Office Service

“ This course is available for girls who have completed two years of high school work, and consists of the following subjects: bookkeeping, office practice, commercial arithmetic, commercial law, penmanship, and business English.

*“ Course Preparing for Stenographic and Higher
Clerical Work*

“ This course is available for girls who have completed three years of high school work, and consists of the following subjects: shorthand, typewriting, penmanship, business arithmetic, English, bookkeeping, political geography, and office practice.

*“ Course Preparing for Secretarial Work and
Bookkeeping¹*

“ This course is available for young men and women who are high school graduates² and consists of the following subjects: *a* (for secretaries), stenography, typewriting, business correspondence, office practice, commercial procedure; *b* (for bookkeepers), bookkeeping, use of office machinery, filing devices, commercial arithmetic, commercial law.

¹ Not given during the year 1914-1915.

² College graduates may be admitted upon special action of the School Committee.

"Students in each of the above courses are advanced as rapidly as their progress will permit, and they are given certificates when they have satisfactorily completed the courses without regard to the length of time required for completion."

In closing this chapter on constructive suggestions regarding the improvement of commercial education of secondary grade, I wish to emphasize the need of a tolerant and inquiring attitude on the part of educators engaged in conducting or establishing commercial schools. As an instance of a progressive and receptive attitude on the part of commercial teachers may be adduced the procedure of the Massachusetts State Committee on Business Education at its first meeting on June 14, 1913, best illustrated by the following resolution, which was unanimously adopted and assigned to a committee for appropriate action:

"It is the sense of this meeting that commercial courses should be founded primarily upon the basis of business needs, as far as such needs are discernible. This committee seeks the facts concerning those business needs which affect commercial education, and welcomes opinions of business bodies, and wishes to encourage all investigations that may shed light upon this important matter."

Much of the evidence concerning business needs appearing in this volume was secured from investigations inspired by and resulting from the quoted resolution.¹

Much other and more searching investigation in different sections of the country will be necessary before it can be said that we have any adequate fact basis for certain and stable commercial courses. It is highly desirable that each community undertake an inquiry for itself. There may be found generally much uniformity of commercial and school

¹ Chapter IV contains a review of three investigations.

conditions, but always will there be discoverable local situations which will modify in some degree the particular plans suitable for the individual community. The closer association of business men and commercial teachers will be important in effecting coöperation and mutual understanding. Borrowing a ready-made plan from some community with acquired prestige in commercial education has many objections. Usually the plan itself is never fully understood, and consequently only partially effective; there is also loss of the enthusiasm which self-achievement brings: we encourage self-activity and personal achievement in our pupils; these same virtues are no less important to grown-ups, whether business men or teachers. Finally, it is the spirit in which the problem of improved commercial education is considered that is significant. More and more we are coming to see that the solution of all the vital problems involved in the quest and realization of better democracy must be attempted in the spirit of coöperation, of justice, and of toleration. In aspiring to a higher conception of democracy, society has placed its chief hope in the schools; consequently in the spirit with which the school attempts the solution of its own problems will our democracy expect to find example, inspiration, and progressive achievement.

CHAPTER VI

COMMERCIAL HIGH SCHOOLS AND COMMERCIAL COURSES IN HIGH SCHOOLS ¹

SECTION I

SCOPE AND AIMS OF THE REPORT

THE scope of this report comprises a description of commercial education in the city high schools; an analysis and summary of existing conditions; and certain constructive recommendations. In the third section, devoted chiefly to recommendations, will appear most prominently the aim of this particular investigation, viz., a suggestive program of procedure toward more efficient means and methods of commercial education.

HIGH SCHOOLS MAINTAINING COMMERCIAL COURSES

Of the twenty high schools (in 1911-1912) maintained by the Board of Education, thirteen offer commercial courses. Two high schools for boys — the High School of Commerce, Manhattan, and the Commercial High School, Brooklyn — devote exclusive attention to commercial instruction.

The eleven other schools, known as general high schools, offer elective commercial courses, and about forty per cent of the pupils are found in these courses. In view of the fact that there are special commercial schools for boys and none for girls, it is not surprising that in the general high schools

¹ This chapter consists of Mr. Thompson's report on the field assigned to him in the New York City School Inquiry, 1911-12, and is reprinted here with no changes in the subject matter. — EDITOR.

the ratio of boys to girls is one to five. In the city at large the sexes elect the work in practically equal proportions.¹

The geographical distribution of schools with respect to residential needs is deserving of commendation. Manhattan has a High School of Commerce for boys and a commercial course for girls in the Washington Irving High School. The Bronx has a general high school with an elective commercial course for boys and girls. Richmond has a general high school with a commercial course for boys and girls. Brooklyn has a special school for boys (Commercial High School), and a commercial course for girls in the Eastern District High School, and in addition Bushwick High School offers courses for both boys and girls. In Queens there are six general high schools offering commercial courses for both boys and girls. No restriction in selecting high schools is placed on pupils, who may attend schools outside their residential districts. Of the whole high school population, approximately one third are enrolled as commercial pupils.

COURSES OF STUDY

A general survey of courses offered in the city high schools, both general and special, reveals the following facts:

General high schools usually offer three-year commercial courses, though there are two exceptions — Curtis, which has a four-year course, and Bryant, which differentiates and offers a four-year course for boys and a three-year course for girls. The High School of Commerce has a four-year course, while the Commercial High School of Brooklyn maintains a dual offering of a three-year course and a four-year course.

The courses in general high schools are largely clerical in nature — bookkeeping, business arithmetic, stenography, and typewriting, courses which have traditionally been as-

¹ Dr. J. J. Shepard, *Chamber of Commerce Bulletin*, March, 1912.

sumed to constitute the chief elements of commercial training. In the two boys' high schools (High School of Commerce, Manhattan, and Commercial High School, Brooklyn) these same subjects appear largely, though there is added work in commercial sciences, in commercial foreign languages, and in economic subjects. In all the schools a certain measure of "liberal" training accompanies specialized work, a foreign language being a general requirement. Specialized work is preponderant in the three-year courses of the general schools, and "liberal" subjects are found in greater proportion in the special schools.

CHARACTER OF PUPILS

The character of pupils, social, economic, and intellectual, may profitably be mentioned in this general survey of the subject. The usual testimony of the principals of general high schools is to the effect that commercial pupils constitute the less desirable element of the school. "Pupils electing the commercial course are of inferior intellectual power." "Doubtful if pupils are of as good mental ability as those of other courses." "Less serious and sturdy character." "Students in commercial course inferior in ethical standing, inferior intellectually and socially." "They are not so good mentally. Many choose the commercial course because they think it is easy and because they had trouble in getting through the grammar school." "Character slightly below." Conditions seem to be better in the two special high schools for boys, and in one general high school for girls. In this last school the principal reports that commercial girls are brighter and more intelligent than academic girls.

PERSISTENCE OF PUPILS

The persistence in membership of commercial pupils seems to be markedly lower than the average. The average loss of membership for the city for the past five-year period is thirty-one per cent annually. The High School of Com-

merce in the last seven years has lost an average of 36.7 per cent; the Commercial High School of Brooklyn, forty-one per cent for the years 1909-1910. Every school reports a larger percentage of loss of commercial pupils than the city average or the school average. The Washington Irving High School reports the highest percentage of membership, where forty-six per cent of commercial girls persisted until the third year, against forty-seven per cent of girls pursuing academic work.

One apparent reason for greater loss of membership is the character of the pupils mentioned in the foregoing paragraphs. Principals assign various other reasons: "Attractive openings come to them long before the course is completed; so long as business men are content to employ young people only partly prepared, so long will the schools have difficulty in holding their pupils to the end of the course." "Many elect commercial courses who do not expect to remain long." "Pupils who cannot stay in school long take the commercial course." A noticeable feature is the fact that boys are less persistent in all schools than girls. A suggestive reason for this is found in the testimony of one principal, who says that a boy can get a job because he is a boy, but a girl must possess training. Frequently a family close to the economic line of necessity will call upon the boy to make the sacrifice of schooling. In all high schools the total number of boys and girls entering is nearly equal; the number graduating in 1911 shows about two girls for every boy.¹ The "mortality" among boys in New York City high schools is apparently twice that of girls, and the "mortality" of boys in commercial courses is greater than that in other courses.

HOW PUPILS CHOOSE COMMERCIAL COURSES

Investigation showed that boys and girls select the commercial course as follows: The greater proportion of pupils

¹ Annual Report of City Superintendent, 1911, page 98.

make the selection the final term of the elementary school. Circulars describing the offerings of high schools are distributed. The principals and graduating class teachers discuss with the pupils the significance of the printed data, and the children take the circular home for the signature of the parents. High school principals report that some elementary school principals call meetings of the parents for discussion and conference. High school principals feel that they have little influence on or control over the selection of courses. In one high school (Washington Irving High) the course of study delays for one year the beginning of specialized subjects. During this period the child is subjected to a trying-out process; study of the tastes and aptitudes is made by teachers, and the kind of choice is influenced by this process. Another principal of a mixed high school (Bushwick) gives particular attention to the question of a proper choice made in the elementary school.

High school principals in the main believe that there are shortcomings in the character of the guidance given to pupils. "Little attention is given to vocational guidance. Pupils ought to select after one or two years in the high school. Individual tendencies could then be determined." Principals state that pupils are unconsciously sorted into groups with respect to mental ability. In Manhattan and The Bronx the pupils of best mental attainments are said to go to Townsend-Harris Hall, connected with the College of the City of New York. Further, the testimony of principals is that the brighter pupils take academic work, with Latin as a major; that the next in mental grade take general work with modern languages, and that those remaining take commercial subjects. There is discoverable no carefully organized effort, such as is found in several American cities,¹ to give vocational guidance in the elementary school, so that pupils are directed to the course most suited to their abilities and subsequent needs. One principal reports improvement in these conditions: "A better quality of stu-

¹ Boston has a well-developed plan of vocational guidance.

dents are selecting the course. Time was when the commercial department was looked upon as a suitable place for students unfitted to do the hard work of the regular course. Today an increasing number of bright, well-qualified young people are definitely choosing the commercial course."

TEACHERS OF COMMERCIAL SUBJECTS

(Teachers of commercial subjects in all high schools come into the service by qualifying by examination upon one of two merit lists, known respectively as the Stenography and Typewriting list, and the Commercial Subjects list.) By commercial subjects are understood chiefly those clerical in nature. The general requirements of experience are somewhat similar to those of other candidates; there is, however, the provision that business experience may be counted year for year (not exceeding five years) for the required experience of all teachers. A commercial teacher is, consequently, one who instructs in some clerical art, such as bookkeeping, stenography, or typewriting. It may be pointed out here, though more specifically treated in the third section of this report, that the present system makes no provision for securing teachers to instruct in commercial English, commercial modern languages, or in subjects dealing with fundamental commercial sciences, such as economics or business organization. The requirements for commercial teachers, *under the limitations noted*, are well suited to secure efficient and trained teachers.

Inspection of the work of commercial teachers showed a general good level of achievement. Some complaint was made that under the requirements elementary school teachers may acquire a knowledge of a system of stenography, secure a license in stenography and typewriting, and become commercial teachers without adequate practical experience. In such a special school as the Commercial High School of Brooklyn the large majority of the teachers have had no training in business or in business methods. They

have come from the general lists, and have been assigned to their present position because of the system which demands that eligible candidates shall be chosen in the order of their rating, and from requirements which seek to secure teachers for other types of high schools. It is consequently not surprising to find in special schools a considerable number of teachers who have no other sympathies and use no other methods except those characteristic of a classical or academic high school. The vocational stimulus cannot fail to lose force in a special school where the largest influence comes from teachers who are not themselves imbued with the aims for which the school really stands.

A study of the teaching assignments of commercial teachers shows a proportionately larger number of teaching periods than the average.

REGENTS' EXAMINATIONS

Commercial as well as academic work is standardized by state syllabi and tested by the regents' examinations. This system tends to produce a certain degree of uniformity of subject matter and achievement. All the high schools except the High School of Commerce report adherence to the state syllabi and regents' examinations. The High School of Commerce takes the regents' tests in stenography and typewriting; for all other subjects local examinations, approved by the Board of Superintendents, are employed.

The regents' examinations make no provision for "academic" subjects related to commercial training, except one course called Commercial English and Correspondence. This course is designed to be given "in the last year of the course, when the pupil has had training in English composition and literature."¹ It forms hardly a complete course in itself, but constitutes a supplementary part of a separate English course pursued simultaneously. Sometimes an additional two periods a week are assigned and a teacher in

¹ State Syllabus, 1910, page 359.

the commercial department gives the instruction. Commercial pupils are not usually required to take this special English course to secure diplomas. The majority of general high schools maintaining commercial courses do not even offer it.

RELATION OF ACADEMIC TO VOCATIONAL WORK

It is a fair statement to say that commercial students get but little related academic work. The English courses of three-year commercial pupils are uniformly those of academic or college preparatory character, and, seemingly without any reason, these courses are incomplete in themselves, since they constitute but three quarters of a course designed for four-year pupils. The mathematics, modern languages, and science are those designed to meet regent requirements, which in turn are planned to meet the traditional academic or college entrance requirements.

The individual plan of the High School of Commerce and, to a less degree, of the Commercial High School of Brooklyn (which reports using regents' examinations wherever possible), shows a praiseworthy effort to make all the school subjects reflect the vocational purpose of the school. Several other schools are attempting better to adapt the general ("academic") subjects to the needs of commercial pupils, but the state system of requirements¹ makes such attempts difficult and usually ineffective. The significance of this state of affairs will be more fully discussed in a later section of this report.

COMMERCIAL LABORATORIES AND OFFICE EQUIPMENT

A commercial school necessarily has a laboratory with devices and equipment where the practice of clerical arts is carried on. This usually consists of rooms with typewriters, rooms fitted with bookkeeping desks, and places where model banks and filing cases are found. In most instances

¹ Regents' examinations.

these appurtenances are adequate, though often used by noticeably large divisions of pupils. No shortage of commercial material is reported. There are often found too many pupils for the typewriters, though here the difficulty is lack of class room, not the disinclination of the authorities to furnish machines. The practice of having a commercial museum showing commercial processes and products has hardly begun. The High School of Commerce has the beginning of a museum which promises in time to develop in extent and adequacy. There is, with the present accommodations, little room for the expansion of the project.

Practice work connected with clerical subjects is noticeably intelligent and effective. Practical work of the standard required in business offices is approximated in a degree commensurate with the limitations of the number of pupils, space, and equipment. Most teachers showed that they possess the requisite knowledge, which they are able to impart, concerning matters of business (clerical) technique. In some schools an exception to this statement was noted in the matter of penmanship. In the three-year courses penmanship seems to be slighted in order to secure more time for bookkeeping. One period per week for one term is insufficient in the case of the average pupil to assure the acquisition of a clear, legible, and rapid style of handwriting.

PLACEMENT OF GRADUATES

Employment bureaus and follow-up systems are reported in practically all schools. Some of these are reasonably effective. All schools would like to expand these agencies; but lack of clerical assistance and lack of other opportunities render expansion difficult. As is to be expected, the two special schools lead in these important matters. The High School of Commerce has a valuable scheme of following up graduates, but it reports difficulty in keeping track of many boys who move away, leaving no addresses. The Commercial High School of Brooklyn presents certain facts

concerning its employment bureau, the purport of which is that business houses are circularized at the time of graduation, and that last year, in response to 412 requests for help, 250 boys were placed in employment. Suggestive data from other schools may be added to give a notion of the general condition. "We have a card index showing data regarding all graduates. Every graduate is now profitably employed as far as he cares to be." "The typewriter company places all our pupils." "Yes, being organized to operate with the work in typewriting." "Employment bureau practically abandoned for lack of help. No follow-up system for same reason."

Several schools report coöperation with typewriter companies in placing graduates. Placement is recognizably better in the control of the school, because coöperation with private commercial companies involves the obvious danger of subordination of social interest to private gain. It cannot be assumed that a typewriter company is always wholly disinterested in its efforts to find positions for commercial pupils.

APPARENT AIM OF COMMERCIAL EDUCATION

What is the current conception of commercial education? Some passing reference has been made to this matter, but a more specific account is desirable in order to complete the general description of existing conditions. The State Syllabus (1910)¹ lists commercial subjects as follows: elementary and advanced bookkeeping, commercial arithmetic, business writing, commercial law, history of commerce, commercial English, and correspondence, shorthand, and typewriting. Not all of these subjects are required. The state diploma in commercial subjects is given to pupils who meet the general requirements in English, science, mathematics, and history, and pass department examinations with a grade of not less than seventy-five per cent in the following subjects: advanced bookkeeping and office practice, commercial

¹ State Syllabus, 1910, pages 334, 335.

arithmetic, commercial law, commercial geography, commercial English and correspondence, and business writing. These requirements are only for pupils pursuing a four-year course. History of commerce is not found in the offerings of the three-year course of the general high schools. In both the High School of Commerce and in the Commercial High School is found the subject of economics, and in the former school the history of commerce. In the main, in all schools the majority of the commercial work is clerical. Facility in business (clerical) technique is the major aim. The courses of study are based upon the assumption that efficiency in clerical arts is the major desideratum in business preparation.

Section I has dealt with day school conditions exclusively. A description of evening school conditions and other forms of supplementary education affecting commercial training will appear in Section III in connection with the general body of recommendations.

SECTION II

TESTIMONY OF NEW YORK CITY PRINCIPALS CONCERNING THE AIM OF COMMERCIAL EDUCATION

In the preceding section the attempt has been made to present in general terms the most important facts affecting the problem of commercial education. No effort has been made to pass final judgment as to the merits or shortcomings of the system. In this second section a more critical study will be made of the most important phases of the problem; but final constructive recommendations will be reserved for the third section of the report.

We may appropriately begin this section with a closer examination of the aim of commercial education as stated in the preceding section, viz., the assumption that efficiency in clerical arts is the major desideratum in business preparation. We shall first present additional evidence that the schools do make that assumption, and as evidence shall

quote from statements of principals: "In our brief three-year course we are attempting to train students immediately for clerical positions." "The burden of the course is devoted to preparation for clerical work." "We plan to have our students (boys) equipped for what is usually the first step in business — a clerical job — but we feel that a commercial school of this type (four years) which did not have a higher aim than that would fall woefully short of its great opportunities." "In the past I fear that the conception of the work of the school has been somewhat that of a 'clerk factory'" (boys' school, four-year course). Particularly with respect to boys, the principals do not agree that the clerical aim is the proper one. Subsequently in this section of the report it will be shown that the courses of study exalt this aim even in the special boys' schools. There can be no doubt at all respecting the aim of the three-year courses.

TESTIMONY OF BUSINESS MEN

The evidence of the business world is against the assumption that clerical training is the main objective of commercial education. Business men in particular do not assert that this conception is sound. Through the courtesy of the New York Chamber of Commerce some evidence bearing upon this point was secured during February and March of the current year (1912). The following circular letter was sent to about a hundred of the largest commercial houses of New York City:

"1. In the selection or promotion of your employees in any department of your business, do you set any educational standards, such as graduation from grammar school, high school, or college, as a requisite for employment?

"To what extent?

"2. Do you encourage employees to continue their education, either by attendance upon night schools or by any other means?

"By what methods?

"3. Do you perceive any defects in the present business training given in our high schools?

"If so, what defects are most striking?

"4. Do you advise the study of foreign commercial languages? If so, please check in the order of importance the following: German, French, Spanish, Italian, Portuguese.

"5. For a young man entering your employ which of the enumerated clerical subjects is it necessary to know — stenography, typewriting, bookkeeping? Would a study of the fundamental principles of business, such as merchandising, advertising, salesmanship, business organization, be more valuable to young men than specialization in clerical subjects?

"6. Should schools of commerce attempt to train for particular types of business, e.g., merchandise, transportation, banking, etc.?

"7. It is manifest that to fulfill its best purposes commercial education should keep in constant touch with the business world and advance with the evolution of mercantile development. What methods can you suggest of promoting such a relation between the public commercial schools and the business interests of the city?

"(Comments at length or suggestions of any nature will be welcomed.)"

The answers to question five have a particular bearing on the point we are now considering. On the basis of fifty replies received up to the time of tabulation, "fundamental principles of business" is chosen over clerical arts in the ratio of nine to one. This same study was made in Boston in 1906, and in Pittsburgh in 1909, and with somewhat similar results respecting the relative importance of fundamental and of clerical subjects.

The following quotation is taken from the report of Edward Rynearson, Director of High Schools, Pittsburgh,

Pa., to be found in the May number (1910) of *The School Review*. The second part of question five differs from the New York City question as follows: "What other lines of training will be more valuable as a preparation for a business career in your house?"

"Of those replying thirty-two per cent think that bookkeeping alone is essential; twenty-eight per cent state that all three are necessary; nineteen per cent think that none of the three subjects is essential; fifteen per cent think that penmanship is essential; eleven per cent think that mathematics is necessary; eleven per cent consider a knowledge of good English indispensable; eight per cent think that arithmetic is valuable; four per cent state that typewriting and bookkeeping are necessary; three per cent think that designing and advertising are valuable."¹

A few quotations from typical replies from New York business men may be added here: "We employ no male stenographers. Occasionally we can use a business school graduate in our bookkeeping department. The study of business principles ought to be of value." "For the majority of positions in our employ we should prefer that he had a knowledge of the other subjects named by you." "A knowledge of stenography and typewriting would be necessary in filling certain positions where a male stenographer was desired. In our particular business a knowledge of bookkeeping as it is generally taught in high schools might in some cases be helpful, but hardly ever absolutely necessary. A study of the fundamental principles of business, such as merchandising, advertising, salesmanship, and business organization, would in general seem to be more valuable to young men than specialization upon clerical subjects."²

¹ This evidence shows that business men in Pittsburgh do not consider that clerical subjects are of exclusive importance in commercial preparation.

² See Appendix, page 167, Letters of New York Business Men.

FIGURES FROM THE PERMANENT CENSUS BOARD

As a second and different kind of evidence, we present the following:

At the time of preparing this report (April, 1912) Mr. George H. Chatfield, Secretary of the Permanent Census Board, had prepared a report covering the occupations of 66,617 boys and 65,191 girls in New York City between the ages of fourteen and eighteen. As stenographers and typewriters were found 586 boys and 3244 girls; as bookkeepers, 824 boys and 1364 girls; errand boys and girls fall into the proportion of 12,529 boys and 1204 girls. Here is seen the specialization of occupation by sex and the preponderant number of girls in clerical positions.

EVIDENCE DRAWN FROM BUSINESS ORGANIZATION

Additional evidence, differing in character from that given above, may be seen in the analysis of the organization of a New York business house having an average of 5100 employees:

ORGANIZATION OF A RETAIL DRY GOODS HOUSE ¹

	Number Employed	Per Cent of Total Force
Managerial	120	2.3
Buyers	130	2.5
Salespeople	1,900	37.0
Stenographers	70	1.3
Clerical	360	7.1
Inspectors	250	4.9
Stockkeepers	120	2.3
Bookkeepers	190	3.7
Auditors	90	1.7
Delivery	550	11.0
Porters and Cleaners	180	3.5
Messengers (Junior)	160	3.2
Cadets (Junior)	260	5.1
Factory Hands	500	9.8
Elevator Operators	60	1.2
Mechanics	160	3.1
	5,100	99.7

¹ These replies are reprinted as received from business houses.

A grouping from the above figures of positions which may be considered clerical (stenographers, clerical, bookkeepers, auditors) shows 13.8 per cent. Compare this figure with the combined items, buyers and sellers, 39.5 per cent, and the result is significant. Certainly clerical training does not prepare immediately for the largest section of commercial employment, namely, *selling*.

Below are added organization figures of three other business houses.

ORGANIZATION OF A RETAIL DRY GOODS HOUSE, BOSTON ¹

1. Approximate number of employees, 967.
2. Classification of employees, e.g., managerial, buyers, salesmen, clerical, etc.

Buyers and Assistants	54	Alteration	} 117
Managerial	77	Piece Workers	
Sales	311	Manufacturing	
Stock	90	Repairers	
Floor Assistants	28	General Receiving and Delivery	
Cashiers	56	Departments	42
Clerical	116	Shoppers and Foreign Repre-	
Decorators	7	sentatives	16
		Maintenance	53

3. The relative number employed in each class, e.g., fifteen per cent clerical, etc.:

Buyers and Assistants	5.6	Alteration	} 12
Managerial	7.9	Piece Workers	
Sales	32.2	Manufacturing	
Stock	9.3	Repairers	
Floor Assistants	2.9	General Receiving and Deliv-	
Cashiers	5.8	ery Departments	1.7
Clerical	12.0	Shoppers and Foreign Repre-	
Decorators . . . . .	.7	sentatives	} 5.5
		Maintenance	

¹ These replies are reprinted as received from business houses.

INSURANCE BUSINESS, NEW YORK, WITH 15,488
EMPLOYEES ¹

What percentage of the whole organization does each class of employees represent — e.g., fifteen per cent clerical?

	Per Cent
Superintendents	2.10
Assistants	9.38
Agents	57.86
Inspectors . . . . .	.16
Managers . . . . .	.04
Heads . . . . .	.59
Assistants . . . . .	.61
Bookkeepers	4.53
Clerks	12.44
Stenographers	2.95
Typewriters	5.22
Telephone Operators . . . . .	.03
Electricians . . . . .	.16
Engineers . . . . .	.31
Porters and Cleaners	1.98
Commissariat Help . . . . .	.79
Printers . . . . .	.78

WHOLESALE DRY GOODS HOUSE, BOSTON, 365 EMPLOYEES ¹

The relative number employed in each class, e.g., fifteen per cent clerical, etc.:

	Per Cent
Managerial	2
Buyers	6
Salesmen	24
Clerical	19
Stock Hands	25
Packers	4
Sorters and Callers	7
Entry Clerks	4
Watchmen, Loft Men, Elevator Men, etc.	6
Carpenters and Repairers	2
Engineer	1

¹ These replies are reprinted as received from business houses.

Figures from other business organizations show approximately the same ratios with a single exception, that of a bank, where the greatest proportion of employees serve in clerical capacities.

TRANSFERS IN BUSINESS

Do commercial employees begin in the clerical position and transfer into other departments? Evidence is strong that such a transfer is not the usual procedure. From the replies of business men the following are offered as typical answers: "If he enters the office it would be most desirable to know bookkeeping. If in the store, merchandising. We employ women stenographers." "We employ experts in the three subjects mentioned, but a knowledge of stenography and typewriting is necessary only to those employed in that department." "We do not make it a condition, in the case of young men entering our employ, to be familiar with stenography, typewriting, or bookkeeping, unless they are specifically employed to do one of the three kinds of work."¹

The objection may be raised that the statistics presented above deal only with large business organizations, and that facts relating to small businesses are not considered. It is safe to assert that the same ratio of clerical work is fairly constant whatever the size of the business may be. It is admitted that a boy entering a small business where he will be called upon to perform varied duties will need to have some facility in clerical arts; but he will need more to have in addition other training if he is to be as generally useful as possible. If an individual, unaided, could carry on one complete business, the percentage of his time devoted to the different activities of commerce would approximate the proportions indicated in the examples above. The major efforts of this individual would be in the competitive department of the business; and, if he could acquire by

¹ See Appendix, page 167.

training facility in but one business operation, the essential art would be buying and selling, not keeping books.

EVIDENCE FROM THE VOCATION BUREAU OF BOSTON

The Vocation Bureau of Boston, in a recent bulletin (1912) dealing with the subject, "The Department Store and Its Opportunities for Boys and Young Men," presents a suggestive body of confirmatory evidence. Extract from pages 81 and 82:

"The most usual lines of promotion and transfer for boys may be best shown by actual examples in one of the large stores, among those investigated, for the month of July, 1911, there being from one to six cases of each of the following: Floor boy to retail office; floor boy to shipping room; office boy to stock boy; office boy to time desk; errand boy to inspector; errand boy to truckman; stock boy to teller; inspector to retail office; inspector to mail order department; inspector to receiving room; inspector to stock boy; inspector to examiner; inspector to busheling room; inspector to adjustment office; truck to salesman; truck to inspector; truck to office; stock boy to salesman; elevator boy to salesman; elevator boy to salesman in the bedding section. To this may be added a few cases of young men during the same time and in the same store: Salesman to floor superintendent; cashier to retail office; assistant buyer to buyer in the hosiery department; salesman to overseer of juvenile help; assistant buyer of silks to be manager of a millinery house of an outside firm; from the stock office of the store to the Department of School Supplies of the City of Boston, through a civil service examination."

There are several instances of transfer here from the clerical side of the business to other functions, but these illustrations do not show that initial entrance into the clerical

side of the business is the essential or usual prerequisite step to liberal business opportunities, which is the present mistaken assumption of most commercial teachers.

COMMERCIAL EDUCATION FOR GIRLS

The burden of the evidence above deals with the boy situation, but there is solid ground for the inference that a similar condition exists with respect to girls. The deduction is proper that familiarity with clerical processes is not a prerequisite for general commercial employment. Clerical training for the girl is more appropriate because a much larger proportion of girls find employment in clerical positions, but clerical training for girls is not a preparation for the larger proportion of opportunities in business houses.

THE SCHOOL TRAINS CLERICAL EMPLOYEES CHIEFLY

The reason why school principals conclude that clerical training is most desirable from the character of the requests of business men is because commercial schools have acquired a reputation for training clerical help. When the business man wishes a clerk he applies to the "business" school; when he wishes a boy or girl for other departments of his business he does not so apply. One of the New York City principals makes a proper inference in the following:

"In placing boys in positions after they are graduates, our experience has been that the largest demand is for boys equipped with stenography and typewriting; the next largest for those who are accurate in figures; the third for those with general horse sense; and, lastly, for bookkeepers. Such facts seem to justify the theory that typewriters are mainly in demand, but this might be met by the statement that, if business men *knew* they could get from us graduates who, without stenography and typewriting, are fitted for more important things, they would seek from us such young men."

It is entirely possible that every boy graduate of New York commercial schools might enter business in a clerical capacity, and that subsequently the majority might transfer to other and more promising departments; and yet the position maintained in this report remains true; because the schools as yet train but a small proportion of the pupils who go into business. The historic example of a Cortelyou who became a cabinet member by reason of his knowledge of stenography has led too many educators to conclude that the royal road to success lies along the same path.

Studies in business organization made in connection with this report ¹ show a range of thirteen per cent to nineteen per cent engaged in clerical work, and that transfer from clerical departments to other departments is unusual. The evolution of success is usually within the department of original entrance; that is, the boy who enters the book-keeping department advances in that department, and the boy who enters on stock usually becomes a salesman. The chances of a high grade of remuneration in the clerical department, except at the head, are relatively less than in the competitive side of business, and the likelihood of upward growth is relatively less. If we should adopt Dean Schneider's classification of occupations as energizing and enervating,² clerical training will certainly come closer to the second, though probably not at all to the degree which is found in industry.³

THE NARROW AIM OF PRESENT DAY COMMERCIAL EDUCATION

It is a fair inference that commercial education with its present limited objective is aiming at the preparation of boys and girls for approximately fifteen per cent of the demand for commercial employees. This fraction repre-

¹ By the New York Chamber of Commerce and Boston Chamber of Commerce, see pages 109-112.

² See his report.

³ See Chapter IV, page 73.

sents an important and integral part of business needs. Because it is the lesser part, it should not be neglected. As indicated on page 103, this part is done well, and we can suggest little in the way of improvement.

WHERE THE MAJORITY OF THE BUSINESS RECRUITS COME FROM

What about the other eighty-five per cent of commercial employees? From what kind of training do beginners in the other departments of business come? We do not know definitely. The answer to this question could not be undertaken within the limits of this investigation. We shall suggest on page 135 of this report how further evidence bearing upon the question may be secured, but the following facts and surmises are suggestive. First, it must be admitted that in many businesses a certain proportion of positions cannot have appropriate training in a secondary school because of the immaturity of high school pupils. The large percentage of college graduates who enter business each year shows how certain positions are filled. Again, the number of commercial schools of collegiate grade is becoming considerable, and the graduates of these institutions enter business very rarely in clerical capacities.

THE STANDARDS SET BY BUSINESS MEN

Question one of the letter of inquiry sent to business men has a bearing upon the question now under consideration. Business men, as a rule, do not set educational standards even for clerical employees, although for a clerical position specific clerical ability is often sought. For all other positions, which constitute about eighty-five per cent in the average business house,¹ only general qualifications are indicated, such as good appearance, good family, good creden-

¹ Pages 109-112.

tials. The following are some typical answers to question one: "No. Each applicant stands on his own merits, but it goes without saying that a well educated young man always has the preference." "We have no exact educational standards. We examine applicants in elementary arithmetic and spelling. Naturally we give preference to applicants with the best educational equipment, but very often our beginners (boys of sixteen and seventeen, girls of seventeen and eighteen years of age) have only a grammar school training." "Juniors are engaged by reason of personal appearance, aptness, and general intelligence. It often happens that graduates are not as bright nor as intelligent nor as adaptable as those who have not graduated."

Again we present results from Pittsburgh as corroboratory evidence:

"Of those replying, twenty-eight per cent set no educational standards; forty per cent prefer high school graduates (three per cent of these preferred high school graduates to college graduates); fourteen per cent are of the opinion that the more education the better; eight per cent require only common school education; six per cent prefer commercial education; one per cent prefer technical school education; one per cent require 'brains,' not 'diplomas'; one per cent consider prime requisite 'congeniality.' 'I would not overlook the most essential of all requisites, and those are good deportment and personal tidiness, which are of the utmost importance and carry great weight.'"

We infer from the opinions of business men two things:

1. That clerical training is not a prerequisite for employment, except for clerical positions, nor at present is any other kind of specific commercial training sought as an alternative.

2. As far as the testimony of business men goes, the

results are mainly negative; there has been no clear formulation of principles to guide commercial schools.

It is likely that, even in the case of clerical positions, the majority of beginners enter without preparation and are trained in the business houses. For, while clerical training aims at about fifteen per cent of the openings, by no means do the special schools fill this proportion of the places. So of necessity the great majority of business positions are filled by boys and girls who come from elementary schools, the general, manual training, and classical high schools, private schools, and colleges. It is significant that business men do not point out any superiority of the commercial school product over the general school product. We cannot escape the conclusion that the non-commercial schools have a larger influence in the sum total upon business than do the special schools, and it is an open question whether or not the general school is not giving at present more appropriate training for the major business needs. The pupil in the general high school does not get false impressions concerning business demands; he is not led to believe that clerical ability is the one essential, and in applying for a position he does not seek office work as the only business opportunity. The issue raised here will be constructively dealt with on page 140 of this chapter.

It is evident that business men have had no choice of an alternative, for commercial schools have not offered anything but clerical work. During the past five years there has been a marked development of schools of salesmanship conducted within stores, and correspondence schools of the same nature. Both illustrate, as far as they go, the growing conviction that other and more important functions of business must have appropriate training.

COEDUCATION IN COMMERCIAL EDUCATION

The principle of coeducation in business education as carried on at present in general high schools deserves some

comment in passing. The significant fact observable in Mr. Chatfield's figures is the specialization of occupation by sex. Business men confirm this fact by the frequent statement, "We employ women stenographers." Clerical training is more appropriate to the tastes and capacities of girls. They succeed better in it, and find employment with this equipment more readily. Coeducational commercial schools, as stated above, testify that boys drop out faster than girls. Here is a typical answer from school principals: "Initial ratio of boys to girls is 2 to 3; at the end of the course the ratio is 1 to 4 or 5." The boys of the High School of Commerce of Boston, which has the double advantage of being a separate school (no girls), and having a course of study of a character not exclusively clerical, persist in attendance on the average better than boys in general schools, e.g., High School of Commerce, Boston, annual loss of membership, 13.46 per cent (1906-10); English High School, Boston, 16.7 per cent (1907-10); Central High School, Detroit, 17.6 per cent (1905-10); East High School, Cleveland, 17.4 per cent (1905-10).

AN EXPERIMENT IN SEGREGATION OF THE SEXES

In one general high school in New York City (Bryant), an experiment has been made during the current school year in segregating the sexes in commercial courses. Following is the reply of the principal under date of March 19, 1912:

"Referring to yours of the 13th instant, I beg to say that before the segregation of the sexes in our commercial department forty-one per cent of the boys who entered would leave before the end of the first term. Since we have made a commercial course adapted to the requirements of boys, only eight per cent leave during the term, and of this eight per cent seven eighths leave the commercial course to enter the regular four-year course."

While this experience seems to be a strong endorsement, the experiment has been carried on for too short a time to base positive conclusions upon it.

Economic, social, and sentimental reasons still tend to keep many high schools coeducational, but it is well worth while in New York City to inquire further into the principle of segregation. For the purpose of effective commercial education, we maintain that the segregation of the sexes is of vital importance.

COURSES OF STUDY IN NEW YORK CITY

We may now proceed to examine with some detail several courses of study in operation in New York City commercial schools. Courses of study can only be judged in the relation of principle to practice. If the aims are challenged then the course of study exalting those aims cannot be approved. Let us examine several courses of study in the light of desirable and of mistaken aims.

Courses of Study of the Commercial High School, Brooklyn

THREE-YEAR COURSE

FOUR-YEAR COURSE

FIRST YEAR

	Hours		Hours
English	5	English	5
Business Practice (Arithmetic and Penmanship)	5	Business Practice (Arithmetic and Penmanship)	5
Commercial Geography.	2	Commercial Geography	2
Biology	3	Biology	3
Bookkeeping and Correspondence	4	German or Spanish	5
Music	1	Music	1
Drawing	2	Drawing	2
Gymnasium	2	Gymnasium	2
Assembly	1	Assembly	1

✓

SECOND YEAR

Hours		Hours	
English	3	English	3
History	3	History	3
Stenography	5	Stenography	3
Physics or Chemistry	4	Physics, Chemistry, or Algebra	4
Accounts	5	Language	5
Music	1	Bookkeeping and Correspondence	4
Gymnasium	2	Music	1
Drawing	2	Gymnasium	2
Assembly	1	Assembly	1

THIRD YEAR

Hours		Hours	
English	3	English	3
American History	4	American History	4
Stenography	5	Stenography	5
Law, Shop, or Drawing	3	Language	5
Accounts	2	Accounts	5
Typewriting	5	Music	1
Music	1	Gymnasium	2
Gymnasium	2	Assembly	1
Assembly	1		

FOURTH YEAR

Hours	
English	3
Language	4
Typewriting	5
Law, Drawing, or Shop	3
Economics	3
Chemistry, Physics, or Geometry	4
Music	1
Gymnasium	2
Assembly	1

The Four-Year Course gives a thorough preparation for business and for life, and leads regularly to the DIPLOMA of the school. It also fits those who desire it for higher study.

The Three-Year Course is designed for those who cannot afford to take the longer time. It omits the study of a foreign language and leads to a *Certificate*.

The courses are so arranged that at the end of the first year a pupil may change from the three-year course to four, or from the four-year to the three.

Parents will be kind enough to indicate in the space below the course they wish their sons to take by crossing out the course or language which is NOT to be taken.

The aims of the four-year course are set forth in the first explanatory paragraph, and they are apparently twofold; namely, a preparation "for business and for life" and for higher institutions. The advantages of specialization are lessened in this double objective. The whole theory of special schools is to devote the major effort to some one aim. The attempt to include preparation for higher institutions is unfortunate. It was explained to the investigator that fitting for life was not an optional and distinct aim, but a concomitant of the purpose of this school which, while fitting boys for business, gave general culture and equipment for citizenship. This is entirely praiseworthy, but it ought not to be necessary to assume that a proper vocational education does not contain within its own meaning these general assumptions. Fitting for life has long been stated to be the aim of general education; but the definition of the meaning of the expression has too often not been clear or satisfactory.

The choice of subjects found in the course of study and the methods of teaching them in a special school intended to provide vocational (commercial) training for business is justified by New York City principals, as follows: first, some of the subjects must be of a general character, giving the material necessary for any well-informed person — such subjects as English, history, arithmetic; second, the methods involved in acquiring certain subjects are useful as a part of a general equipment — such subjects as mathematics, science, composition; third, other subjects must constitute a body of special vocational equipment — such subjects as bookkeeping, office practice.

The course of study under consideration shows, to a degree, a comprehension of and adherence to these principles. Such a subject as English, while constituting a subject involving general values, still can and should be in a commercial school a specific kind of English for pupils selecting the vocation of commerce as an objective; for it is entirely possible that one subject may possess a twofold value, viz., culture and vocational training. A similar statement

will apply to other subjects, such as history, chemistry, and physics. The assertion that the course of study fits for higher institutions shows, in a large measure, that the vocational motive shares attention with another, the accomplishment of which is difficult and engrossing. An examination of college entrance requirements and state syllabi will bear out this contention.

In the above course of study are found subjects which cannot be justified as requirements for any adequate reason, e.g., music for four years, drawing, and geometry. We can find no adequate evidence to show that stenography should be a requirement for boys in a commercial high school. Shop work with no bearing on the problems of commerce as an elective in a commercial school is out of place. Biology may be justified on the ground of its general value; but as fundamental commercial sciences physics and chemistry with special applications should be preferred. Biology is more aptly the science for agricultural education.

The course of study is too choppy; that is, there are too many subjects, and too few periods are assigned to each. This probably comes from the attempt to divide the aim of the school. We agree with the following opinion of the Committee of Sixty (High School Teachers' Association) contained in the official bulletin of March 16, 1912: "We concur in general with the present tendency in educational theory favoring greater concentration upon fewer high school subjects. At present many of our students are required to carry six or more subjects at once. This leads to distraction, superficiality, and the violation of many principles of efficiency."

In justice to the school under consideration, it should be mentioned that a number of subjects, e.g., chemistry, are made to conform to the vocational purpose of the school. One English teacher expressed himself as dissatisfied with the English course as tested by regents' requirements, and favored a different kind of English to suit better the needs of commercial pupils. The head of the department, how-

ever, was of the opinion that the academic English was of superior advantage. The principal of the school was entirely favorable to the opinion voiced in the criticisms given above. He says: "Our syllabi follow in English the regular state and city syllabus; in other departments we follow plans of our own, adapted to the special requirements of a commercial school. Our history is made largely social, industrial, and economic. Our physics and chemistry are given but four periods a week, where the college entrance requirements call for five periods, and the work is made to turn largely upon industrial applications. Our mathematics is also necessarily below college entrance requirements, being given only four periods a week."

*The Commercial Course in Jamaica, Flushing, Newtown,
Richmond Hill, Far Rockaway, and Bushwick
High Schools*

FIRST YEAR

English	5
German, French, or Spanish	5
Commercial Arithmetic, 1 and 2 Physiology and Hygiene	5
Bookkeeping, Penmanship, and Business Forms, 1 and 2	5
Drawing	2
Voice Training and Declamation	1
Music	1
Physical Training	2
	<u>26</u>

Pupils wishing to defer the study of Bookkeeping until the second year may take in its place either Biology or Algebra.

SECOND YEAR

English	3
German, French, or Spanish	5
Bookkeeping	5
Stenography, 3 and 4	5
Typewriting	4
Business Correspondence	3
Physical Training	2
Music	1
	<u>28</u>

Pupils not wishing to take both Stenography and Bookkeeping may substitute for either of these Algebra or Chemistry.

THIRD YEAR

English	3
German, French, or Spanish	5
Bookkeeping and Office Practice, 5 and 6	5
Stenography, 3 and 4	5
Typewriting	4
Commercial Law	3
	<hr/>
	25

Pupils not wishing to take both Stenography and Bookkeeping may substitute for either of these Geometry or American History and Civics.

This course is followed in the schools noted above and is closely similar to the courses used in the other general high schools offering three-year courses. It is interesting to note that pupils not wishing to take the vocational subjects of the course may substitute other subjects not vocational. If pupils take advantage of this option, how may it be claimed that they are pursuing a commercial course? One principal asserts that pupils practically never do take advantage of it in his school. The course is frankly clerical; it is pursued mainly by girls, who can best profit by it and who find the readiest market for clerical accomplishment, and it is defensible for them. It is not suitable for boys, a lesser number of whom are attracted by it; the failure of boys to persist in it has already been noted. The general subjects, such as English and modern languages, are not related to the vocation, and very frequently no separate sections are maintained for commercial pupils. The course, on the whole, is better for girls than the course in the Commercial High School of Brooklyn is for boys. The requirement of commercial law may be questioned. The term is pretentious and suggests a degree of maturity which cannot be assumed in the third year of the secondary school period.

*Course of Study in the High School of Commerce,
Manhattan*

COURSE OF STUDY

THE HIGH SCHOOL OF COMMERCE, MANHATTAN

FIRST YEAR		Periods
Required		
English		4
German, French, or Spanish		4
Algebra		4
Biology * (with especial reference to materials of commerce)		4
Business Knowledge and Practice **		6
Drawing (second half year)		2
Physical Training *		2
Music		1
		<u>27</u>

* Including Physiology.

** Including Local Industries and Government of the City of

New York	2
Business Writing	2
Business Arithmetic, Business Forms and Methods	2

SECOND YEAR		Periods
Required		
English		3
German, French, or Spanish		4
Plane Geometry		3
Chemistry (with especial reference to materials of commerce)		4
History * (with especial reference to economic history and geography)		3
Stenography		3
Drawing and Art Study		2
Physical Training		2
		<u>24</u>

* First half year, Beginning of Nations to 1300 A.D.

Second half year, Modern History to 1750.

Electives	Periods
German, French, or Spanish	4
Bookkeeping and Business Forms	3
Business Arithmetic	1
Commercial Geography	1

Required	THIRD YEAR	Periods
English		3
German, French, or Spanish		4
Geometry and Algebra *		3
Physics		5
History ** (with especial reference to materials of commerce)		3
Drawing and Art Study		1
Physical Training		2
		<u>21</u>

* In the second half year, students may elect additional Stenography and Typewriting or Bookkeeping in place of the second course in Mathematics, or may give double time to Mathematics by omitting either Stenography or Bookkeeping.

** First half year, English and Colonial History, 1620 to 1750. Second half year, Modern History (England and the Continent), 1750 to present time.

Electives	Periods
German, French, or Spanish	4
Bookkeeping and Business Arithmetic	3
Stenography and Typewriting	3
Drawing and Art Study	2
Commercial Geography	1

Required	FOURTH YEAR	Periods
English		3
German, French, or Spanish		4
Economics and Economic Geography		4
History of the United States (with especial reference to industrial and constitutional aspects)		4
Physical Training		2
		<u>17</u>

Electives	Periods
A Foreign Language	4
Advanced Chemistry	4
Economic Biology	4
Trigonometry and Solid Geometry	4
Elementary Law and Commercial Law *	4
Advanced Bookkeeping, Business Correspondence, and Office Practice	4
Stenography and Typewriting	4
Drawing and Art Study	4
Modern Industrialism	1

* Students who do not elect law in the fourth year may receive instruction in Commercial Law in connection with Advanced Bookkeeping.

The course shows a broad scope intended to cover both "general culture" and training for business. It is open to the criticism of containing too many subjects with too few recitations per subject. Again, we do not approve stenography as a compulsory study for boys in any year. We seriously doubt the wisdom of compulsory music, drawing, and art. Plane geometry as a *compulsory* study in commercial schools cannot be defended, and the geometry and algebra of the third year are of more than doubtful value in such a school. The amount of compulsory algebra and geometry throughout the course is practically that of a college preparatory school, and this school is not frankly college preparatory.

The High School of Commerce is the only school not fettered by regents' examinations, and the opportunity to establish a course of study more suitable to the special needs of commerce is consequently large. The course of study is stronger than that of the Commercial High School of Brooklyn; but the school has not taken full advantage of its opportunities. In addition to the defects pointed out above, it should be noted that commercial geography as an elective one period per week in the third year could well be offered with more periods as a required study in the same year instead of algebra and geometry. Commercial law in the fourth year (elective) should replace history (required).¹

The school syllabi show a commendable effort to embody the vocational purposes of the school. The general subjects, when possible, are made to possess a commercial value. For example, the aim of the instruction in modern languages is said to be "thorough grounding in the essentials of grammar; reading of representative German, French, and Spanish prose; the acquiring of an active vocabulary; mastery of simple commercial correspondence. The aim of the course is to give the pupil a fair speaking knowledge, a good reading knowledge, and a familiarity with commercial Ger-

¹ See footnote 1, page 140.

man, French, or Spanish." Testimony from the principal is as follows: "The general work is intimately related to the fundamental work of the school, and for that reason has little in common with the general work of the academic high school. Every department has its particular problem, the task of making its work function in a genuine training for business." We conclude that the ideal set up in this testimony would be far more productive of results in a course of study more definitely vocational.

TEACHERS IN COMMERCIAL SCHOOLS WITHOUT EXPERIENCE AND TRAINING

As noted on page 100, the lack of teachers with commercial experience and sympathy is a serious matter. In the Commercial High School of Brooklyn, eighteen out of ninety-six are so-called commercial teachers—meaning teachers who instruct in clerical arts. The remaining teachers—seventy-eight in number—came from general lists designed to furnish teachers for academic high schools. It cannot safely be assumed that the majority of these teachers will acquire the vocational point of view after being assigned to the special school. Higher schools of commerce (college and university) have attained some prominence in this country, and it would seem probable that such schools could train sufficient teachers for secondary schools of commerce.¹ The requirements of Germany are suggestive as proper models. In that country teachers for secondary commercial schools are required either to be graduates of higher commercial schools or else to have actual commercial experience.

REASONS FOR POORER QUALITY OF COMMERCIAL PUPILS

Attention was called on page 97 to the relatively poor quality of commercial pupils (particularly in general high

¹ See page 32.

schools), poorer in mental power, social grade, and in personal character. A law of human gravitation probably explains this phenomenon. Our commercial education at present trains only for the "enervating" occupations of commerce, corresponding in a rough way to the automatic work of industry. Commerce has its full amount of energizing occupations — more perhaps relatively than has industry. But commercial education does not take cognizance of these opportunities; and as a consequence the higher type of individual, the energetic, forceful, and ambitious boy or girl, does not pursue commercial education.

There are other contributory reasons to the failure of the best pupils to select commercial education. Social prejudice is still strong against many forms of applied education. Teachers in the elementary schools, consciously or unconsciously, influence the brightest pupils toward what is considered more liberal education. Ambitious parents still see in the professions a better prospect than in business. Changes in this attitude are beginning. The overcrowding of the professions and the growing opportunities of business are counteracting influences; the preponderance of college men entering business is another significant sign.

Commercial education can be made to appeal to all classes of pupils, but several specific things are immediately necessary to remedy present conditions. Commercial education must greatly expand its scope to embrace the larger opportunities of business; business men must coöperate in many ways and must set standards and point their needs more specifically. It is also important that a large amount of information concerning business opportunities must be made available for pupils, parents, and teachers.

OBJECTIONS TO REGENTS' EXAMINATIONS

Finally, a word must be said here as to the effect of regents' examinations on commercial education. The foremost

objection to the regents' examinations in this field is the fact that these examinations enforce and perpetuate a set of standards which are artificial, not real. The limitations of the present purpose of these examinations, and the desirability of adding other and more important aims, have already been pointed out. Further, a set of written tests, such as constitute the regents' examinations, do not test vocational efficiency, for the true test of vocational efficiency is the success of the individual in business; and a thorough system of following up pupils in business is a more appropriate test of vocational efficiency than any written test can be. But the teacher is held responsible for the success of boys and girls on written papers. The teacher's promotion to the highest grade of rank is judged in part by this standard. The natural inclination of the teachers is to disregard the real test in the business world and to exalt the artificially imposed standard. The investigator found evidence that the temptation is strong for teachers to drill pupils on past examination papers, to emphasize topics which are liable to be asked in the state tests. The danger is constant that coaching and cramming may take the place of instruction and the development of real power. Again, it is an open question whether written examinations really test educational achievements. Educators have never agreed that they do.¹

The apparent reason why commercial education has been subjected to the regents' examinations is due to the fact that commercial subjects have been classified as academic subjects, instead of vocational subjects. The state department does not demand examinations in agriculture, home science, and shop work, presumably because these subjects

¹ In a paper before the Harvard Teachers' Association, March 9, 1912, Clyde Furst, Secretary of the Carnegie Foundation, made the statement that an exhaustive study of the results of college entrance examinations showed that achievements in these tests have little relation to the records made in the preparatory schools and small relation to the grades attained in college. — *The School Review*, page 324, May, 1912.

are classified as vocational. The failure of educators to conceive commercial education as vocational in nature is the cardinal error in the whole matter. The further treatment of this matter will be reserved for Section III.

SECTION III

VOCATIONAL EDUCATION DEFINED

We asserted in the concluding statement of Section II that the crux of the shortcomings pointed out lay in the failure to conceive commercial education as vocational education. What, then, is vocational education, and why is commercial education not vocational? We have adopted the following definition of vocational education:¹ “‘Vocational education’ shall mean any education the controlling purpose of which is to fit for profitable employment.” The definition, however, is not so significant as the interpretation of it. Certain forms of vocational education in several states are aided by state money. The definitions of vocational education in these cases are very specific, and approved schools must fulfill the conditions laid down by the state authorities.

In general, state-approved vocational schools must have a direct connection with the vocation taught. Teachers in the schools must have had actual experience in the vocations; there must be advisory committees composed of members representing the industries taught; the equipment must be suitable, and the selection of pupils must be made somewhat upon the matter of fitness and adaptability. Courses of study must be formulated in harmony with the aim as defined; provision for coöperative and part-time work must be made. There is no admission of the principle of divided motives such as have been pointed out in connection with the New York City commercial schools. The vocational

¹ Massachusetts State Laws, Acts 1911, Chapter 471.

schools under the interpretation of the Massachusetts law must meet the needs actually discoverable in the industries aimed at.

We have pointed out the discrepancy between ~~commercial~~ needs and commercial education. In a word, education is vocational in proportion as it meets the needs and conditions of the vocation. New York City commercial schools lack the vocational characteristics just so far as they fail to see and meet those needs. In a broad sense, all schools are vocational in that they aim at general preparation for participation in life's activities; but preparation for vocational life in a specific and comprehensive way is the essential aim of vocational schools.

NEW YORK CITY COMMERCIAL COURSES ARE NOT VOCATIONAL

New York City's commercial courses are academic rather than vocational. The general subjects in the course are in most cases not related to the vocation; the specific vocational subjects cover only a part of the vocation, and the lesser part at that. Compared with the vocational industrial courses taken as a type, the commercial courses under consideration have so small a connection with commerce that they cannot be strictly classified as vocational. It is true that the pupils who have pursued these courses go into commerce, but that fact does not make the courses vocational. The product of all the schools in any large commercial center goes into commercial pursuits, but this fact does not make the schools vocational. Approximately sixty per cent of the graduates of one of our large Eastern colleges go into commerce,¹ but this institution cannot be called a vocational school. The failure of the teachers to conceive commercial work as vocational is well illustrated in the official bulletin of the High School Teachers' Association of New York

¹ Studies made of the classes of 1901, 1904, 1905 of Harvard College.

City, March 16, 1912. Here, under an excellent suggestion for a five-subject program, is found the designation of commercial subjects as optional with algebra, Latin, household economics, mechanic arts; that is, commercial work is just like an academic subject, to be pursued four or five periods a week in connection with other subjects having general or indefinite aims. One would not for a moment expect to train industrial workers by any such plan, and the attempt to train commercial workers is equally futile.

THE COUNTRYWIDE MISCONCEPTION OF COMMERCIAL EDUCATION

New York City is not the only city with a false or inadequate conception of commercial education. Such a conception is countrywide. The prevailing notion concerning commercial education may be seen in the printed proceedings of the National Educational Association, 1911 (pages 827 to 868). The important papers in the proceedings have the following titles: "Bookkeeping Fundamentals," "Teaching Typewriting for the Best Results," "Business English," "Commercial-Economic Geography," "Shorthand, Its Educational and Practical Value." Nowhere in the discussions does there appear the realization of fundamental principles. None of the speakers seemed interested in the matter of whether or not commercial education is pointing in the right direction, to say nothing of whether or not it is hitting the mark.

INADEQUATE FOUNDATION OF COMMERCIAL EDUCATION

There are reasons for the widespread ineffective type of commercial education. Commercial education came into the public school systems of the country at an unfortunate time, at a time when it was pedagogically unfashionable for schools to have a vocational purpose. All subjects at

this epoch were idealized in order to make them yield what were considered cultural values. When manual training came into the schools, many people thought it would benefit industry. We now find it necessary to industrialize manual training if it is to serve vocational ends. It will be equally necessary to vocationalize commercial education, for commercial education has been conventionalized into a high school subject which gives "points" toward a high school "*academic*" diploma. The aims, means, and methods of commercial education have been subjected to no investigations preliminary to adoption, nor to real tests as to present effectiveness in practice. Commercial education was originally conceived to be merely clerical training, like that carried on in business colleges, and that notion, largely unchanged, still persists.

A BETTER PLAN

Let us suppose that commercial education, like industrial education, had been delayed until the present time. Let us assume that state authorities in order to establish commercial education should appoint commissions to study the problem and to report an appropriate plan of procedure. What would they most likely do, and what plans would probably be proposed? Without doubt the program of procedure adopted would be quite similar to that for industrial education.

The plan adopted for state-aided schools in a neighboring state are suggestive. In Massachusetts an investigation of the need of an industrial school in a community is made through a temporary commission, which consists of ¹ "manufacturers and workmen representing dominant industries of the vicinity, of ladies of experience in social and industrial questions, and of members of the local school

¹ Bulletin No. 3, 1911, Massachusetts State Board of Education.

committee, together with the superintendent of schools." The problems to solve are in part these: "What is the need of industrial education in the community? What are the dominant industries to be served by the proposed school? What becomes of boys and girls leaving school at fourteen? Which groups are to be reached by different forms of industrial, household arts, or agricultural training? What part is the all-day school to play? the part-time (coöperative) school? the evening school?"

The above method is recommended. Why should not such a procedure be advantageous in establishing commercial schools and in testing commercial schools now in operation? The problem of industrial education is closely similar to the problem of commercial education. Each leads to useful occupation in the community. Training for the production of goods and training for the marketing of goods should be based on similar principles. An increasing number of industrial corporations combine in one management both economic operations. There is no reason why one should be practical and the other academic.

ADJUSTMENTS THAT COMMERCIAL EDUCATION MUST MAKE

Commercial education to fulfill its function must make several important adjustments. Courses of study must be so planned that the general subjects shall be related to commerce; teachers of general subjects in commercial schools should have had either practical business experience or training in higher commercial institutions; *and the more important departments of business should receive appropriate recognition.*

In the studies of business organization, referred to above,¹ we saw that a large portion of business may be called competitive, i.e., buying and selling. In the study of the depart-

¹ Pages 110, 111.

ment store organization we saw that forty per cent of the whole force are employed in the active, creative function of business. Commercial schools must train for this need. Clerical training does not train for the buying and selling of goods.

BUSINESS MEN HAVE NOT SEEN THEIR RESPONSIBILITIES

Again, commercial education must establish working relations with business houses — a partnership in which each does its share, the school in giving proper theory, and the business house in offering opportunities for practice. The problem of proper commercial education will not be solved until the business man admits and assumes his responsibility in the matter. Coöperative arrangements are no more impossible in connection with business houses than in connection with factories, and there is no reason why the manufacturer should show recognition of responsibility to the extent of shouldering part of the burden of education and the business man expect the state to assume the whole function. In fact, there is but one philosophy of vocational education: differences should be found only in details.

Because the public school has hitherto assumed the sole burden of commercial education, commerce has felt no responsibility for it. But the experience in vocational (industrial) education points strongly to the general conclusion that the school unaided cannot deal effectively with the problem (see Dr. Schneider's report). Business men will need to go through the evolution of thought which is leading the manufacturer to assume his share in industrial education. For reasons of efficiency, expense, and expediency, commercial training will need to be divided between the school and the business house. Business, like industry, formerly had a system of apprenticeship which will need to be reëstablished in some form of coöperation with the schools. In the meantime the schools must not wait; a plan

which is immediately possible must be undertaken; and practical coöperation between the school and business must be constantly aimed at.

DIFFICULTIES IN THE WAY OF BETTER COMMERCIAL COURSES

It is true that trained teachers and suitable textbooks are not now available, that we have no satisfactory standards of work. There never will be these teachers nor the essential means of instruction unless we make a beginning, and we have too long delayed the attempt. Five years ago the materials of industrial education were unorganized, and no teachers were available. The energy of states and individuals has done much in the short intervening time; a markedly successful beginning has been made, and the essential materials for effective industrial education are beginning to appear. A vigorous beginning of improved commercial education is equally possible in the next five years. The important thing is the conviction that the commercial education we now have must be thoroughly reorganized and improved.

NEWER TYPES OF COMMERCIAL SCHOOLS — HIGH SCHOOLS OF COMMERCE

The creation of high schools of commerce in the large cities of the country shows a beginning of the realization of the principles maintained in this report. Unfortunately, these schools, as a rule, have not broken away from the clerical traditions which have obsessed commercial education. In the following pages we present two courses of study which are suggestive of what is needed.

Course of Study for a Boys' Commercial School

(4 years)

FIRST YEAR

	Periods per Week of Home Preparation	Periods per Week of Recitation
English (related) ¹	4	5
Commercial German, or Spanish, or French (to be pursued for four years; to be selected after one month in school)	4	5
Penmanship, 1st half; Business Knowledge and Practice, 2d half	4	5
Physical Geography, ¹ $\frac{2}{5}$ of year; Physics, ¹ $\frac{2}{5}$ of year	4	5
Mathematics (Commercial)	4	5
Assembly (talks by business men) . . . . .	..	1
	<hr/> 20	<hr/> 26
No electives.		

SECOND YEAR

English (related) ¹	4	5
A Modern Language. (See 1st year)	4	5
Bookkeeping	4	5
General History, ¹ $\frac{2}{5}$ year; Commercial Geography, $\frac{3}{5}$ year	4	5
Mathematics (Commercial)	4	5
Assembly (talks by business men) . . . . .	..	1
	<hr/> 20	<hr/> 26
No electives.		

THIRD YEAR

English (related) ¹	4	5
A Modern Language. (See 1st year)	4	5
Chemistry (Commercial)	4	5
Typewriting . . . . .	..	1
Assembly (talks by business men) . . . . .	..	1
Economic History	4	5
Local Industries . . . . .	..	2
	<hr/> 16	<hr/> 23

¹ These general subjects are understood in each case to be treated in relation to commerce.

	Periods per Week of Home Preparation	Periods per Week of Recitation
Elective — One of the following subjects required:		
Bookkeeping	4	5
Stenography and Typewriting (to be pursued 2 years)	5	6
Plane Geometry	4	5
Advanced Commercial Arithmetic (Special Commercial Problems)	4	5
Drawing (Commercial Design) . . . . .	..	3

FOURTH YEAR

English, 1st half (related); Civil Government, 3d quarter; Commercial Procedure, ¹ last quarter . . .	4	5
A Modern Language. (See 1st year)	4	5
Economics	4	5
Bookkeeping, unless taken 3d year as elective (including Arithmetic and Penmanship review) . . .	4	5
Assembly . . . . .	..	1
Lectures by business men, Advertising, Salesmanship, South America, Business Procedure, Economic Resources of the United States . . . . .	..	2
	16	23

Elective — One of the following subjects required:

Merchandise, Salesmanship, Business Organization . . .	4	5
Bookkeeping, Accounting	4	5
Stenography and Typewriting (continuous elective) . . .	5	6
Chemistry, Applications to Commerce	4	5
Drawing (Commercial Design) . . . . .	..	3

The above course of study is not offered as a finality, but as one that is practicable under present conditions and promises a possibility of development away from the clerical instruction of the past toward training for the larger aspects of business activity. In the course of time the group (fourth year) named "lectures, etc.," should grow to a more defined subject given the full time during the fourth

¹ Such aspects of commercial law as may be valuable and comprehensible to students of high school age.

year. This course of study does not compel exclusive attention to clerical subjects, though there is opportunity by means of electives for boys to get as good clerical training as has been offered in the past. The general tendency of the course is to direct the boys' attention toward the active, competitive side of business. By means of electives in the fourth year, opportunity is given to specialize in one of the three major functions of business, viz., merchandising, accounting, secretarial work. Along with the pursuit of the above outlined course all students should undertake apprenticeship work in stores; they should be employed on Saturdays, Mondays, during holidays, or by means of some other part-time arrangement. Theory without practice is unprofitable.

Coöperative Arrangements Between Schools and Business Houses

We recommend the beginning of coöperative plans between commercial schools and business houses. We present no argument for the desirability of such coöperation because objections are not so apt to arise over its desirability as over its practicability. Successful experiments are now carried on, e.g., in Boston, where boys work during the long vacation period, on Saturdays, and during the Christmas and Easter holidays. The definite week-and-week plan characterizing industrial education has not been widely attempted. It is probable that commercial education will find some other arrangement more profitable. The best plan can be discovered only by experiment, and experiment should begin. No one has attempted yet, apparently, a part-time plan for girls; the difficulties here are probably not greater than for boys, and the need of such a plan will become increasingly apparent.

For a girls' clerical course we commend the one found in the Washington Irving High School as most effective. This course has the advantage of concentration upon voca-

tional subjects in the second and third years. The course can be improved by requiring general subjects to be related to the vocation. Exemption from regents' examinations would make this easily possible.

Washington Irving High School

Course of Study of Three Years

FIRST YEAR	
Required	Periods
English	5
Commercial Arithmetic	5
German, or French, or Spanish, or Group II, or Group III, of second year, and additional drawing	5
Drawing	2
Domestic Science and Art	5
Physical Training, including Physiology and Hygiene	2
Music	1
Declamation and Voice Training	1
	—
	26

SECOND YEAR	
Required	Periods
English	5
Physical Training	2
Music	1
Declamation and Voice Training	1
Drawing	2
	—
	11

The Modern Language chosen in the first year may be continued during the second and third years as an alternative for Music, Declamation, and Drawing in the case of those who select Group I, Group IV, Group V, and Group VI.

Second and Third Years

(Stenographers and Typewriters)

Stenography, Typewriting, Bookkeeping, Penmanship, Spelling, Office Practice	19
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THIRD YEAR

Same as Second

Merchandise and Salesmanship for Girls

We recommend that a course of study similar to the above with the subjects merchandise and salesmanship as a vocational group be established in connection with the Washington Irving High School. The school, by reason of its location in the business district, seems to offer a favorable opportunity for such an experiment. A large number of girls find employment as salesgirls; this employment promises opportunities of comparative attractiveness.¹ The failure of the school system to supply education for the training of salespeople has compelled large retail stores to institute schools of their own, e.g., John Wanamaker. It is quite probable that the stores would enter into a coöperative plan with the schools, whereby this training could be more effectively carried on.

Separation of the Sexes in Commercial Education

We recommend, in general high schools, the segregation of the commercial pupils into a commercial department. This department should reproduce as nearly as possible the separate special commercial schools, and the sexes should be separated for efficiency and for vocational reasons. The boys should pursue a course as nearly as possible like that of the best special commercial schools for boys, and the girls should be given a course founded upon the best models for girls. The city of Cleveland has a high school of commerce for boys and girls; but the sexes pursue different courses, each suited to the needs of the sex.² There is no more reason for the same courses for boys and girls in commerce than there is for the same courses for boys and girls in industry. One of the city high schools (Bryant) is following a plan of segregation like the plan recommended above.³

¹ Bulletin No. 10, Girls' Trade Education League, 6 Beacon Street, Boston.

² Further information contradicts this statement. See Chapter I, page 7.

³ See page 119.

Elective Commercial Courses

The question has been raised as to whether or not pupils taking general courses without a particular objective should be allowed to take incidental commercial courses — such as a year in bookkeeping. As long as the principle of election in high schools is maintained, it will be illogical to deny such privilege. An incidental commercial course taken in high school does not mean commercial training; a pupil with this equipment offering himself to a business house as a product of specialized training will damage the cause of commercial education. Undoubtedly much of the criticism of business men on commercial schools has been due to experience with such inadequately trained boys and girls. It is evident that a boy who has pursued a course or two in manual training is not fitted for industry, and it is equally evident that a commercial subject or two does not fit for commerce. Our general recommendation for specialization, for segregation, and for concentration suggests a general modification of the elective system in high schools; but we will not press this point further than to state that vocational education cannot be effectively undertaken under the principle of election of studies as generally applied today.

Evening and Continuation Schools

A report on the efficiency of commercial education would be incomplete if it did not deal with the problem of evening and continuation commercial instruction. An excellent exposition and summary of this subject was made by Dr. John L. Tildsley, principal of the DeWitt Clinton High School, in an address before the New York Chamber of Commerce.¹ Mr. Tildsley quotes Mr. Chatfield's figures, showing that there are 400,000 boys and girls between the ages of fourteen and eighteen in New York, of whom less than 150,000 are enrolled in schools, public and private. Approx-

¹ Monthly Bulletin, Chamber of Commerce, March, 1912.

imately 250,000 boys and girls are not under day school influence, and it is certain that the major portion of the number do not attend evening schools. A very large part of this total of 250,000 could profit by commercial instruction. The City Superintendent of Schools advised ¹ the substitution of day continuation schools for the present evening schools affecting children coming under the compulsory attendance law. This suggestion is in entire accord with our recommendations, but we desire to emphasize the fact that day continuation schools should be planned to include those between the ages of fourteen and eighteen, and that evening schools be made available for all over eighteen. This plan has proved practicable in Germany and seems easier of control and organization than any other plan.

Mr. Tildsley recommended that commercial continuation schools should be conducted by the Chamber of Commerce. Here we differ. Education has grown to be a function of the state — not only traditional education, but all education which is necessary for the welfare and benefit of the state. Continuation schools of all kinds promise to be effective and integral parts of the general educational machinery. Public opinion has not in the past recognized the now evidently enlarged scope of public education. Conviction of the need of continuation schools is growing, and support and expansion will necessarily follow. Cities of this country are undertaking the problem of continuation schools with success and promise — witness Boston and Cincinnati.

Commercial education in the evening schools of New York has long been carried on. Large numbers of pupils ² are enrolled, and the success attained has been such as to justify, with our recommendations as to continuation schools, the retention and expansion of the work. Mr. Tildsley ³ mentions some of the obstacles of evening schools as follows: "The greatest obstacle to the success of even-

¹ Monthly Bulletin, Chamber of Commerce, March, 1912.

² Report of the City Superintendent of Schools, 1911, pages 140-142.

³ Chamber of Commerce Bulletin, March, 1912.

ing school work in this city is the great fluctuation in the attendance of the pupils. Our business hours are long; the distances to be traveled great. The will power necessary to induce pupils to attend evening courses on four nights a week for one hundred and twenty nights, from eight to ten o'clock, is found only in the exceptional boy. Business education cannot thrive on a forty per cent basis of attendance of those registered."

A thorough investigation of the evening schools could not be undertaken by us, but a brief discussion of evening commercial instruction is appropriate in this report.

Commercial work in evening schools in New York City is quite similar to that in other large American cities. The work is almost wholly clerical and without most of the liberal features found in day-school courses. There is a lack of gradation of students with respect to age, previous attainment, and capacity, a condition which makes for ineffectiveness and loss of membership. As is usual in evening schools throughout the country, there is found a considerable proportion of pupils who come with serious purpose, with a realization of their needs, and with an ambition for improvement; but this class forms the winnowing from the chaff, for the major portion of evening school pupils do not remain and do not profit in considerable measure by the instruction offered.

Improvement can come by a closer adaptation of the work to the needs of pupils. The establishment of continuation schools, recommended above, would be of substantial advantage toward better gradation. The principles of the specialization of work for closer adaptation of courses to commercial needs is no less essential in evening commercial schools than in day commercial schools. Again, the analogy of industrial evening schools is suggestive. One state¹ restricts attendance upon evening classes to those over seventeen years of age, who are employed during the day in in-

¹ Bulletin No. 3, Massachusetts State Board of Education, 1911.

dustries to which evening courses are closely related. The strongest features of the plan are the subdivisions of the courses which meet specifically the needs of the varied groups of industrial workers.

The present undifferentiated and wholesale method of commercial instruction carried on in evening schools forms an example of ineffectiveness in marked contrast to the plan above suggested, which emphasizes individual needs.

Proposed Evening Commercial Course in the High School of Commerce

A course which promises substantial improvement for one class of commercial workers has been proposed by Principal Sheppard of the High School of Commerce. The aim of the proposed course is to supplement the work done in day commercial courses by offering advanced work similar to that of higher schools of commerce, such as the Wharton School of Philadelphia, or the New York School of Commerce, Accounts, and Finance. The course promises opportunity for training for fundamental business needs and does not restrict work to the clerical arts. This course should be offered without delay. The needs for adequate commercial instruction will be met, as we have pointed out, by differentiation of effort; and the course recommended promises to meet effectively the needs of several large and important classes of commercial workers.

Failure of the Public to See the Need of the Extension of Evening and Continuation Schools

Any comprehensive conception of the larger problem of supplementary education, whether in evening or in continuation schools, whether for industrial workers or for commercial workers, does not at present exist in this country.¹

¹ Principal Tildsley has pointed out this fact in the following terms: "In this country we have not begun to realize the importance of this work. We

In New York there are 10,000 commercial pupils in day schools, a somewhat smaller number in evening schools¹ — a total which forms an insignificant figure when compared with the possible number of persons who enter commerce each year, and who could profit by commercial instruction of some kind. In the country at large, in spite of the fact that we spend large sums for education, we have scarcely progressed beyond the ideal of literacy in education; that is, a conviction that each individual should know how to read and write and perform simple numerical operations. We have not yet come to the efficiency ideal of education, i.e., the ideal that each individual should be rendered as competent as possible through training. Our compulsory education law shows this, for we compel none to attend school after fourteen;² we have no compulsory continuation schools except in Ohio and Wisconsin, for those who have entered business or industry. A large expansion of many forms of applied education, involving day, continuation, and evening schools, will be necessary before it can be said that we are dealing with the issue in a way at all commensurate with its importance. When we really begin a comprehensive program of procedure, we must deal with both industrial and commercial education by the same methods, because there is fundamentally but one problem to be solved.

have nothing to offer in comparison with the work done abroad. The Board of Estimate of this city groans over the sum spent for evening schools. This year it has refused to increase the appropriations for the growth of these schools, and it has cut out an appropriation of \$15,000 for opening evening sessions of the High School of Commerce. Munich, in 1906, with a population of half a million, spent \$275,000 for continuation schools of all kinds. New York spent last year \$700,000. If it had appreciated the importance of this field of civic activity as did Munich, it would have spent over two and a half millions.” — Chamber of Commerce Bulletin, March, 1912.

¹ City Superintendent's Report 1911, pages 140-142.

² Persons in New York State between fourteen and sixteen not employed are required to attend day school.

One-Year and Two-Year Commercial Courses

Returning to the day school problem, we recommend as instances of proper differentiation commercial courses of one year and of two years, in addition to the three-year and four-year courses now offered. Those who cannot attend for the longer period should have the best possible opportunities accessible to them. The need of shorter courses has been appreciated by the New York High School Teachers' Association, and set forth specifically in the report of the association (1910-1911):¹

"Many of the boys must necessarily leave a school of this sort before the end of the course. It should then be planned so that certain results should be accomplished at definite stages. This need not be placed before the boy in a way that will tend to encourage him to leave before the necessity really arises. The particular aim of the first year should be to make good office boys; of the second, to make capable clerical assistants; of the third year, to make efficient stenographers. The object of the fourth year is to help the boy locate himself in the special field of commerce and industry that he has selected."

Courses with specific objectives are to be commended, but we cannot agree that the proper aims have been stated in the above recommendations, especially for the second and third years. Facts have been presented in this report showing that other aims for boys are more appropriate (pages 115, 116).

Intermediate Schools and Commercial Courses

Elsewhere will be found a report on the intermediate school (Dr. Bachman's report).² Many pupils entering

¹ High School Teachers' Association, 1910-1911. Sub-committee on a Preparatory Course for boys entering commercial life, pages 85-86.

² This report also is published as a part of the School Efficiency Series.

intermediate schools will pursue studies which will lead to commercial occupations as an outlet. Some pupils will not continue their education longer than the period comprised in this type of school, and others will continue one or more years in the high school commercial courses. It will be highly important, in case intermediate schools with commercial courses are established, that commercial instruction appropriate to the age, capacity, and vocational needs of the pupils be determined. What this will prove to be we are not prepared to state. Subsequent investigations must deal with this important question; but we do recommend that special "field" studies into actual business conditions be an important element of any plans that may be adopted.

Need of a Special Commercial School in Jamaica

While investigating commercial courses in the Jamaica and Richmond Hill high schools, the attention of the investigator was directed to a recommendation of one of the principals that a special commercial high school should be located at some point convenient to both districts, into which the commercial pupils of each school could be collected. We approve this recommendation, believing, as the general tenor of our report indicates, that specialization, segregation, and concentration make for increased efficiency in all lines of vocational work.

SUMMARY AND RECOMMENDATIONS

1. The contemporary conception of commercial education in New York City should be largely expanded, and should emphasize the larger and more important aspects of commercial activities, such as merchandising, salesmanship, business organization, and advertising (see pages 115 to 119).
2. A temporary special commission should be created to consist of commercial teachers temporarily detached from teaching service, who should coöperate with business experts, and examine into business conditions in relation to

commercial education. A commission of this kind will discover a more adequate basis for commercial instruction, whether in day, evening, or in continuation schools, than the city now has. The partial studies presented in this report regarding business conditions affecting commercial education can with profit be carried on until clearer and more positive conclusions can be reached.

3. There should be a council of chairmen of commercial departments in high schools to study, weigh, and recommend to the Department of Education¹ improvements in courses and methods pertaining to commercial education; in other words, there should be a definite agency, officially recognized, for the organization and unification of educational experience in the field of commercial education.

4. The sexes in commercial courses should, wherever possible, be separated. The training for each sex should be differentiated in accordance with the differing tastes and aptitudes of boys and girls, and the different vocational demands which each will meet.

5. The regents' tests for commercial subjects and related academic subjects should be abandoned to give larger scope for objective standards drawn from the business world (see page 130).

6. Teachers of academic subjects in commercial courses and in special commercial schools should possess, either through actual business experience or through theoretical study, or both, a knowledge of and a sympathy with the proper ideals of commercial education. To this end there should be separate eligible lists for all teachers giving instruction in commercial schools and courses (see page 129).

7. There should be a supervisor of commercial work for all grades, whether in intermediate schools, evening and continuation schools, or in day schools. There should be a unified policy throughout the whole range of the work. The divided attention of a number of general supervisors, some

¹ Board of Superintendents and Board of Education.

concerned with day schools and others concerned with evening schools, can yield neither unified policy nor comprehensive treatment.

8. Special teachers should be appointed to act as field agents for commercial schools and courses. These teachers may be called vocational assistants and should perform duties in connection with commercial education similar to those of "coördinators" in connection with industrial education. (See Dean Schneider's report.)

9. Coöperative relations between commercial schools and commercial houses should be sought and established. Teachers and business men must unite upon a common plan. That New York City business men realize the importance of such coöperation is shown by the Chamber of Commerce in appointing a special committee on commercial education. Other commercial bodies should adopt a similar policy. Business men must share the burden of education with the state, and must share this burden in a direct way by giving opportunity for participation in practice during the period of school training. Advisory committees of business men (with advisory functions only) should be established to guide and counsel commercial schools on the one hand, and, on the other, to awaken business men generally to a sense of their responsibilities with respect to commercial education. It is only by an equal partnership of the schoolmaster and the business man that the problem can be solved in a comprehensive and effective way. Up to the present time the schoolmaster has borne more than his share in the attempted solution of the problem.

Appendix



APPENDIX

LETTERS RECEIVED FROM NEW YORK BUSINESS MEN IN ANSWER TO QUESTIONS SUBMITTED IN CONNECTION WITH THE NEW YORK SCHOOL INQUIRY ¹

QUESTION ONE

In the selection or promotion of your employees in any department of your business, do you set any educational standards, such as graduation from grammar school, high school, or college, as a requisite for employment? To what extent?

Answers to Question One

"As a rule we select them from High School pupils."

"Graduation from grammar school."

"We do not require our employees to be graduates, but prefer they should be."

"No."

"No."

"No, but from experience believe we should."

"No."

"No, but we *prefer* school or college graduates."

"Graduation from Grammar School is a requisite. We have a preference for High School graduates — especially Commercial High School. A course in a good business college is a distinct advantage."

"No."

"In the employment of young men in any department of our business we do not set any specific educational standards but much prefer that they should be graduates of grammar school, high school, or college."

¹ The answers have not been edited as to style, capitalization, etc., so that the evidence may appear in its original form.

- "Certain positions in our Company require more education than others, and to this extent inquiry is made as to former schooling."
- "We have no exact educational standards. We examine applicants in Elementary Arithmetic and Spelling. Naturally, we give preference to applicants with the best educational equipment, but very often our beginners (boys of sixteen or seventeen, girls of seventeen or eighteen years of age) have only a grammar school training."
- "No."
- "No. Each applicant stands on his own merits, but it goes without saying that a well educated young man always has the preference."
- "No educational standards are set in regard to my factory employees. Office employees, however, are required to have had at least a grammar school training."
- "We do not set a positive standard as the personality is of more importance than the standard. We give decided preference to the educated applicant."
- "No, but applicants for employment on the clerical force of the New York Life Insurance Company are required to pass an examination."
- "We take our employees generally at a young age, after having graduated from Grammar School and give them the opportunity to work up."
- "In our engineering work, and in the more technical kinds of work involved in the construction and maintenance of the telephone plant and in the management of the forces who handle the traffic, we aim to have men graduated from college engineering courses.
- "It might be well to explain that we maintain schools for splicers, instrument setters, inspectors, operators, and salesmen, where employees are carefully trained in these respective lines of work."
- "For Junior and Minor positions we give practical tests in arithmetic as to quickness and accuracy in figuring, handwriting as to form and legibility, judging both as to neatness of work, as well as correctness and expedition. Generally we have found graduates of the ordinary public school more proficient than those coming from the so-called parochial schools."

"For certain specialized work, graduation from or training in the higher scholastic grades is preferred or necessary. It is, of course, difficult to state any fixed educational standard in the employment of men, as no organization can, with success, limit itself to the employment of those meeting such standards. For ordinary work or in the employment or promotion of younger people, the grammar and high school graduations are not necessary, although preferred."

"Upon engaging boys we make it a point to get active and trustworthy ones who can write English correctly."

"Yes. Preference given to men trained in European Commercial School and American High Schools or Colleges."

"Yes, excepting.*

"* College education we find detrimental in business. Too conceited and unwilling to commence at the lower round and learn the business."

"No."

"Only in exceptional cases do members of the Firm make engagements.

"Our records would not give information in regard to Educational Standards.

"Juniors are engaged by reason of personal appearance, aptness, and general intelligence. It often happens that graduates are not as bright, nor as intelligent, nor as adaptable as those who have not graduated."

"Where possible, we give preference to applicants who have had a High School or College education."

"We require graduation from public schools and give preference to high school and college graduates, because we believe that the additional years of schooling give them a better foundation on which to build."

"Grammar School, preferably High School; college graduates, as a rule, will not stay. (Chief essentials: Penmanship, grammar, spelling, mathematics.)"

"I prefer high school graduates, as such graduates are at about the age where they are willing to adopt our business methods, and are not too old to be willing to begin at the foot of the ladder."

"Other things being equal, we select men with such technical

education as tends to fit them for the special line of work which they choose."

"No."

"General intelligence and personality."

"The applicant must of course make satisfactory showing of necessary qualifications for the position sought. If he is a junior his address and appearance of intelligence are my guides, assisted by information as to the education he has had. It is indispensable that he be well grounded in the three R's."

"Although I regret to say that business men generally make little distinction when they engage boys in the lowest capacity, errand boys and runners (at five or six dollars a week), still if they have had a good grammar school education and graduated, they can more readily find places and promotion generally more likely."

"No."

"Applicants are always asked for details as to their education, but we have no fixed standard for a requisite."

"No."

"No arbitrary rules. For our selling force we endeavor to secure such men as have had training in chemistry."

QUESTION TWO

Do you encourage employees to continue their education, either by attendance upon night schools or by any other means? By what methods?

Answers to Question Two

"We advise it, but do not insist."

"By advice and otherwise."

"In employing children under sixteen years of age we encourage their attendance upon night school, particularly if they have not graduated from the Grammar-school."

"We make no special efforts in this direction."

"Yes."

"When we find a young man with proper ambitions we do all we can to encourage him to advance his education."

"Night schools."

"Yes, by advice, however, only."

"Yes, in a general way."

"No."

"We are always desirous that our employees should, as far as possible, continue their education either by attendance at night school or private instruction."

"The Company as a whole does not. Sometimes individual heads of departments may do so. The Company approves of its employees continuing their education."

"Employees are encouraged to attend night schools and beginners are often advised to do so. The clerks encourage themselves, as the value of an education is very keenly felt in the strife for advancement in position. We have encouraged attendance upon University Extension Courses, and have a number of clerks pursuing studies especially in Actuarial Mathematics and in Accounting.

"To more exactly meet the needs of employees, we have established classes in English (Grammar and Correspondence), in Arithmetic and in Algebra. The English classes, of which there are three, each meeting for one hour each week for a term of thirty weeks, meet a felt need, and we have been able to enroll less than half the number desiring to take the Course. The teachers are specialists from the Staff of the High School. Our purpose is to bring the trained teacher into contact with our clerks for immediate practical benefit."

"Yes."

"Yes. Night Schools."

"Employees are not directly encouraged in any special manner to continue their education, but, at the same time, they are not discouraged in that regard; in other words, 'It's up to them.'"

"Yes, if there are any employees with sufficient ambition. We have had one or two who pursued certain branches at night school with success, but they were extraordinary exceptions. Few are able or willing."

"The Company has no general systematic method for this purpose. In some parts of the office, however, where the work is more or less technical, as in the Actuary's Department,

efforts have been made for a number of years past to encourage employees to devote their time, outside of the office, to studying Bookkeeping, the principles of Accounting, Mathematics, and Actuarial science. Employees of the Actuary's Department who show aptitude are encouraged to take the examinations of the Actuarial Society and are given assistance in such work."

"They know, if they do not continue to educate themselves, particularly in business methods, they will have little chance to advance."

"By the Company's schools referred to in '1,' by the circulation of a Company newspaper 'The Telephone Review,' and of other technical and business periodicals, and by a society known as 'The Telephone Society,' which meets monthly to discuss various phases of the business, the employees of the Company are encouraged to study various phases of the telephone business, and thus to fit themselves for advancement in the organization. There is no general attempt to encourage attendance upon night schools or other outside classes."

"Only on occasions where the incumbent indicates brightness and ability which with more and better training would fit him for a higher position."

"The continuation of education by employees is naturally encouraged by suggestion as to courses of study to fit them for positions higher in the organization, and by affording them the opportunity of attending night schools should their duties not be such as to ordinarily detain them to a time which would prevent their attendance."

"We urge them to study and perfect themselves in German."

"Look with favor on many young men who attend night schools."

"Yes, if apparently they are ambitious, otherwise it is useless."

"No."

"Intelligent employees, in special cases, have been, and are, encouraged to continue education by night school and sometimes by day school, and we have in such cases paid for education, but it is not part of a system."

"For several years we had a school in the store mainly to teach Writing, Spelling, and Arithmetic, but as it was

not in all respects satisfactory, it has been abandoned. Cost was not the serious consideration.

"Everyone at present holding leading positions either as Buyer or holding important Office or other positions has been advanced from the ranks.

"Merit, not educational standards, has been, and is basis of advancement."

"We have no particular method in regard to encouraging employees to continue their education after entering our service. This phase would depend wholly on the individual."

"In a general way only, and not by any defined methods. We have, however, recently given our employees the opportunity of taking a course in the Sheldon School, half the expense being borne by us."

"Left to their own discretion."

"Certainly. By reading good books, attending lectures, and by studying financial and mercantile affairs. Benjamin Franklin said that he learned many things by asking questions, and we encourage all our junior clerks to ask all the questions which come to their minds relative to business matters."

"We encourage young men to study, to attend lectures and to form clubs or associations for purposes of mutual help."

"Yes. We have a school known as the John Wanamaker, New York, Commercial Institute, composed of three schools. Two for boys and one for girls. Commercial Course."

"Yes. Employees must comply with the wants of the business during business hours."

"Except to impress upon our employees that promotion depends upon qualification, and the latter usually on diligence, I do not interfere except to approve where collateral study is voluntarily undertaken."

"I generally advise young boys when they enter our office to attend night schools."

"I have, where there was an evidence of study and application. Paying for courses in business colleges."

"We encourage our employees to attend night schools and pay the expenses of some of them to attend the Y. M. C. A. courses, especially on real estate."

"Yes."

"Yes. Appeal to self interest."

QUESTION THREE

Do you perceive any defects in the present business training given in our high schools? If so, what defects are most striking?

Answers to Question Three

"Too many fads and finishing touches, and not sufficient attention paid to understanding the fundamentals."

"No."

"_____"¹

"Principal defect we observe is handwriting."

"Reading, Writing, Spelling, Grammar, particularly, neglected."

"Writing very poor. Adding a lost art."

"_____"

"The lack of training in logic and debating, and arithmetic (practical) and the languages."

"The most apparent deficiency of the average graduate is his inability to write a good business hand."

"Know nothing about methods."

"We are not familiar with what business training is at present given in our high schools."

"We receive very few high school graduates, our clerical force seldom having gone beyond the grammar school. Our professional force are usually college graduates."

"The main defect we find in the High and Grammar Schools is the lack of concentration on the essentials for business, namely, Spelling, Arithmetic, and Writing. This affects the High School because it affects the rudimentary grades. The Evening High Schools in this city realize the situation and are giving especial attention to these subjects."

"Inability to express their views clearly. Narrow views."

"I do not think the training in writing and arithmetic, either in the High Schools, private schools, or the colleges is what it should be. We have many college graduates apply

¹ The blank space in this and succeeding cases shows that no answer to the particular question was attempted, although the writer had answered other questions.

to us for positions, who cannot write a good hand or spell properly."

"I do not feel in a position to answer this question, except perhaps to say that, in my opinion, English grammar, composition, and spelling are rather neglected."

"We have a good opinion of our high school training."

"Our examinations show that many of the applicants who have spent one, two, three, or four years in the high schools are not well grounded in the fundamentals, i.e., Spelling, Handwriting, and Arithmetic."

"High School training appears to be satisfactory."

"Our experience with the average high school graduate would indicate that their training has been defective in the following directions:

"(a) The ability to analyze a set of conditions, or once the conditions are analyzed to draw reasonably logical conclusions; expressed in another way — ability to think logically and clearly.

"(b) The ability to express themselves clearly either verbally or in writing."

"Cannot specify under this heading."

"From general observation, it might be said that the business training in high schools in clerical work is defective in that it is not sufficiently modern. The pupil is trained in forms and methods which are perhaps antiquated. This appears when he makes his first attempts in actual business, as he is generally unable to identify the technical terms of the different forms of his organization with the names of those he has used in schools. There also seems to be a fairly general lack of the rudiments of English, writing, and mathematics."

"Lack of thoroughness; bad spelling."

"Entire lack of proper commercial training."

"The essentials, i.e., Writing usually poor; Spelling, Arithmetic, and Grammar also."

"—— ———."

"As above stated, the Firm does not engage employees, and those who do, do not feel qualified to answer, but think that in the Public Schools, sufficient attention is not paid to THOROUGH INSTRUCTION in writing, arithmetic, and spelling."

- "We do not feel that we have sufficient information at our command to enable us to reply intelligently to this question."
- "From a commercial standpoint we should judge that the average high school gave scant attention to business training."
- "Poor Penmanship."
- "There seems to be too much attention paid to some of the so-called higher branches of study, to the detriment of the simpler branches such as spelling, geography, English grammar, and legible writing."
- "My impression is that our public schools should give much more attention to manual and industrial training."
- "———."
- "Cannot express an opinion owing to our not being sufficiently posted in regard to the present methods in use to justify us in criticising the same."
- "I have made no study of this subject."
- "An absolute lack of foreign languages and little knowledge of commercial matter."
- "Lack of acquaintance with bookkeeping."
- "Recent graduates seem to be totally unfamiliar with business methods."
- "Lack of practicability."
- "Lack of manual training."
- "No observations."

QUESTION FOUR

Do you advise the study of foreign commercial languages? If so, please check in the order of importance the following: German, French, Spanish, Italian, Portuguese.

Answers to Question Four

- "Spanish, French, German."
- "Decidedly yes. Spanish, French."
- "Knowledge of foreign languages is not necessary in our business, — but would encourage the study of German."
- "Yes, in order of importance as named by you."
- "French, German, Italian, Spanish, Portuguese."
- "Not necessary but desirable — German preferred."

"German, French, Spanish."

"German, French, Spanish, Italian."

"Spanish, German, French."

"—— ———."

"We most decidedly believe in the importance of the study of foreign commercial languages, and for American commerce in manufactures we put SPANISH and PORTUGUESE first, for the reason that as far as the Rio Grande River on the North-American Continent, and extending to Cape Horn, the languages used are Spanish and Portuguese, and as all the countries concerned are non-manufacturing countries, they furnish a greater market for the United States than other countries of the world. Consequently, a knowledge of Spanish and Portuguese is of the utmost importance. French is valuable also, and Italian to some extent, while German is of no particular value except for doing business with Germany."

"For our business, no language is needed except English."

"The study of foreign commercial languages is of benefit in our business only as a mental discipline. Whatever translating needs to be done is easily cared for. Perhaps the order in which you name the languages shows the relative importance as well as any."

"Not to the detriment of general business training."

"Yes. I think you have named the languages properly in the order of importance, but I hardly think I should include Portuguese."

"German and Spanish, I think, are the most important of the languages mentioned."

"Spanish is very useful in our country, having in view development of Trade with South America and West Indies."

"No particular advantage."

"German, Spanish, and French, in the order named, is most desirable."

"Considering only the requirements of this Company, the study of commercial languages is not especially helpful."

"Consider German of great importance and to come first, Portuguese second, as this is the most prevalent among the commercial elements of the South American countries."

- "The study of foreign languages seems advisable, due to probable further development of foreign trade, and in the order named — Spanish, German, and French. Italians and Portuguese, in this hemisphere particularly, are more or less familiar with Spanish."
- "German, Spanish, Italian, French, Portuguese."
- "French, German, Spanish, Italian, Portuguese."
- "Yes. German, Spanish, French."
- "French, Spanish, German, Italian, Portuguese."
- "Not for our business. There are always some in our employ who from birth speak German, French, Spanish, or Italian; such are given positions where they can be called upon when necessary. It is seldom that those who study foreign languages in public schools in New York are able to put such study to practical use."
- "Foreign languages are better taught in Europe. If as well taught here as abroad, they would be valuable, but only to those who intend making practical use of their knowledge. One serious trouble is that children have too many studies. Schools of Languages would supply above deficiency."
- "For our special business we advise the study of Spanish, German, French, as relatively named."
- "We most assuredly do advise the study of foreign languages, and from a commercial standpoint consider Spanish and Portuguese the most important, with French, German, and Italian in the rotation named."
- "Yes. German, French, Spanish."
- "Better to abandon the study of foreign languages except in the case of students who have an aptitude and a desire to adopt one of the professions as a vocation."
- "This almost wholly depends upon the position to be filled, and is necessary or not as governed thereby."
- "French, German."
- "Yes, in the order numbered. Spanish, German, French."
- "Spanish, French, German, Italian, and Portuguese are all valuable acquisitions in the order named, but for the mere mattering that a book education can give, without practice, I should not delay the subject's entrance into business life, but would encourage him to take up whichever he found most advantageous in his leisure hours."

- "Spanish, German, French, Italian, Portuguese."
- "Would depend on the larger nationality employed by the employer. As a merchant with the trading nation."
- "German, French, Spanish."
- "German 1st; Spanish 2d; French 3d."
- "German, Spanish, French, Italian, Portuguese."

QUESTION FIVE

For a young man entering your employ, which of the following clerical subjects is it necessary to know: stenography, typewriting, bookkeeping? (5a) Would a study of the fundamental principles of business, such as merchandising, advertising, salesmanship, business organization, be more valuable to young men than specialization in clerical subjects?

Answers to Question Five

- "*Bookkeeping.* A general knowledge is very desirable; but there must be some specializing."
- "*Stenography — Typewriting.* Both if engaged for same. *Bookkeeping —* if engaged for same. (5a) Yes."
- "The principles of business such as merchandising and salesmanship would be most valuable in our business."
- "Neither. (5a) Yes."
- "It depends. *Bookkeeping* most important. (5a) Yes."
- "Not necessary to know any of the above. Prefer a young man with a good public school education, proper home training, and good common sense — and we will train him in our ways."
- "If he enters the office it would be most desirable to know bookkeeping — if in the store, merchandising. We have women stenographers."
- "Depends on the position he is engaged for. *Stenography —* Yes and no. *Typewriting —* Yes and no. *Bookkeeping —* Yes. (5a) Yes, most decidedly."
- "We employ experts in the three subjects mentioned, but a knowledge of stenography and typewriting is necessary only to those employed in that department. A knowledge of bookkeeping is valuable. A study of the fundamental principles of business should be encouraged."

"Stenography — No. Typewriting — No. Bookkeeping — No."

"We do not make it a condition in the case of young men entering our employment, to be familiar with stenography, typewriting, or bookkeeping, — unless they are specifically employed to do one of the three kinds of work. We believe, however, that a study of the fundamental principles of business, such as merchandising, salesmanship, business organization, etc., is infinitely more valuable to young men going into business than specialization upon clerical subjects."

"We employ no male stenographers. Occasionally we can use a business school graduate in our bookkeeping department. The study of business principles certainly ought to be of value."

"It is not necessary to know any of these subjects. It may be explained that as a rule clerks begin with us as boys and gradually advance from primary to more difficult clerical work. A lad of ready intelligence will grasp the salient features of the work, and if he feels the need of further instruction will go to Evening School or get it in some other way. Boys and girls pick up typewriting with easy facility. In recruiting our typewriting departments it is preferable to train the clerks from the beginning. Stenographers, of course, must learn stenography at the school and have considerable business experience before we find them of much value to us. A knowledge of Bookkeeping is always of value, but as a general rule it is not essential for our work. A study of the fundamental principles of business, as a High School course, should be of great value for its broadening effect."

"*Bookkeeping.* (5a) Yes, I do not think bookkeeping should be neglected."

"It depends on what position the employee is to occupy; if he is to be a stenographer, he must naturally know stenography and typewriting, and if a bookkeeper, bookkeeping. For the majority of positions in our employ we should prefer that he had a knowledge of the other subjects named by you, although they are not essential, as we take applicants only in the lowest positions and train them ourselves."

- "It all depends upon the position the young man is to fill. Of course it is to one's advantage to have a knowledge of stenography, typewriting, and bookkeeping. It seems to me that a study of the fundamental principles of business would be more advantageous to young men, because a knowledge of those principles would better enable them to learn and intelligently understand clerical subjects."
- "Fundamental principles as you specify are very much more important than stenography — but bookkeeping should be understood by all. Stenography is very useful to assist progress."
- "Knowledge of Bookkeeping and the fundamental principles of business would be of assistance in our office work."
- "With us, the work is divided in departments, and it is not necessary for the bookkeeper to know shorthand or typewriting, but the typist must know stenography, etc. It will always be of considerable advantage to acquire by study the fundamental principles of business, unless it is intended by the employee to remain in special work, such as typewriting, bookkeeping, cashier, etc."
- "A knowledge of stenography and typewriting would be necessary in filling certain positions where a male stenographer was desired. In our particular business a knowledge of bookkeeping as it is generally taught in high schools might in some cases be helpful, but hardly ever absolutely necessary. A study of the fundamental principles of business, such as merchandising, advertising, salesmanship, and business organization would in general seem to be more valuable to young men than specialization upon clerical subjects."
- "In large organizations clerical work has to be considerably specialized just as the business has to be specialized and departmentized. The relative value therefore of stenography, typewriting, bookkeeping, etc., depends upon the special department or service which is expected. Of course the broader one's education and knowledge is the more fitted to move from one position to another as opportunities or openings occur.
- "Merchandising, advertising, salesmanship, business organization are all fruitful fields for specializing.

"While good salesmen have to be born rather than bred, education in this line is one of the most fruitful fields and promising opportunities of any in commercial life.

"Good salesmanship is more difficult to obtain than almost any other service in manufacturing and commercial enterprises. It involves ability, the right temperament to judge of human nature, great energy and buoyant spirit, and a philosophic temperament. Snubs, rebuffs, and disappointments must be taken without lessening enthusiasm and hope. While these qualities must have a natural basis in the individual, they can be greatly developed and cultivated by education and experience."

"Bookkeeping, or its essentials, is the usual subject most necessary for a young man to know in entering business. In an organization of many diversified departments, however, it cannot be stated that this is the usual essential, as there are many other classes of labor called for.

"Speaking of the average young man, as most young men have to take the first chance of employment that is offered, it would seem that a specialized education in one particular line would limit his opportunity for such employment. Under the conditions, it would seem advisable to devote his education to clerical subjects, inasmuch as there is a universal field for this class of labor. In this way he comes in contact with almost all of the other details of an organization, or is in a position to observe the workings, and effects, of the special lines of advertising, salesmanship, etc. He may then, at a school, if interested, learn the fundamentals and fit himself for the opportunities which may present themselves in his organization or in any other. This, of course, bears only upon a young man who has no other resources."

"Stenography and Typewriting are desirable. (5a) No."

"Stenography — No. Typewriting — No. Bookkeeping — Yes. (5a) Merchandising — Salesmanship — Business organization most important.

"Bookkeeping (accurate)."

"Depends on the position he is going to occupy."

"In our store, women occupy such positions. We have had bright young people especially taught. (5a) Difficult to

answer in form in which question is put. All the subjects are interesting. That which would interest one, would be useless to another."

"Young men entering our offices as stenographers must also be competent operators on the typewriter. Bookkeeping is a distinctly separate branch. The fundamental principles of business would naturally be more valuable to a young man than the specialization of a *clerical* subject."

"If we want a stenographer or a bookkeeper, we cannot accept anyone not familiar with stenography or bookkeeping. We have found, however, that bookkeeping as taught by some of the 'business colleges' is very unsatisfactory. Generally speaking, the study of fundamental principles of business is in our opinion of more general and far-reaching advantage than the specialization upon clerical subjects."

"Stenography — No. Typewriting — No. Bookkeeping — No. (5a) Yes."

"I do not require a knowledge of stenography, typewriting, or bookkeeping from a young man entering our employ. At the same time a knowledge of all or any would of course be of great service to a clerk. I would urge every young man to specialize on some one subject if he can find a practical instructor. Many teachers are altogether theoretical and have no practical experience."

"This obviously depends upon the young man's selection of his work or profession; this determined, it is clear that he should then fit himself by special study."

"A good common school education is essential. Business organization, etc., is being taught by many firms."

"Depends upon nature of position. (5a) Yes."

"Typewriting is of very little value without stenography. Together I regard them as a valuable asset to a young man. He should also have a fundamental knowledge of bookkeeping."

"Stenography — No. Typewriting — No. Bookkeeping — Yes. (5a) I think it would."

"Stenography and Bookkeeping. (5a) The young man can best equip himself from experience. There is no school that can qualify him equal to experience. It is practice, not theory, that perfects."

- “ Stenography — Some. Typewriting — Yes. Bookkeeping — A little. (5a) Yes.”
 “ Bookkeeping. (5a) Yes.”
 “ Stenography — No. Typewriting — No. Bookkeeping — No. (5a) Yes.”

QUESTION SIX

Should schools of commerce attempt to train for particular types of business; e.g., merchandise, transportation, banking, etc.?

Answers to Question Six

- “ Yes, and give opportunities for aptness in any line best adapted to.”
 “ No.”
 “ The lines of education would probably be good for other lines of business.”
 “ General training preferable.”
 “ Yes.”
 “ No. Do not believe it possible to get the proper teachers. They lack experience of the right kind.”
 “ I think so.”
 “ Yes, most decidedly.”
 “ They should teach the fundamental principles of business, and, following that, train for particular types of business.”
 “ Yes.”
 “ We decidedly believe that schools of commerce should train for particular types of business, but not to the exclusion of the study of the fundamental principles of general business.”
 “ General principles might be useful, but the man who comes up through the ranks, if he has the other necessary qualifications, usually is the most useful.”
 “ Schools of Commerce should be both practical and general in instruction. They should be at once Technical schools, giving the exact instruction needed by the pupils in their particular lines of business, and Business Men’s Universities, imparting a broad culture in everything pertaining to business and commerce.”

"Yes, most important."

"We think that the training referred to would be valuable to any young man entering business."

"The principle of Universities in training students for the practice of Law, Medicine, Engineering, et cetera, should, I think, also apply to schools of commerce in training young men for particular types of business."

"Owing to the vast differences between the above branches, it would be very advantageous to teach them separately if the proper teachers are available."

"If well grounded in subjects mentioned in previous questions, training for special branches could come later, even after business experience begins."

"A general business education will always be of greater advantage than training for particular types."

"It would hardly seem practicable for Schools of Commerce to train for particular types of business, for example, merchandise, transportation, banking, etc., but a study of the broad, fundamental features of such types of business as in '5' would seem to constitute a very valuable training for young men."

"Yes. Schools of commerce, especially in the higher training, should specialize, without, however, overlooking that a grounding of general commercial knowledge should first be instilled before the specializing process begins, otherwise the result may be a pedant or narrow person unable to grasp or judge of essential surroundings and general influences as they affect specialized endeavor."

"The establishment of classes for certain types of business with which all or the greater part of other businesses must come in contact, such as those mentioned in question, seems advisable in the night or higher schools, as the young man may familiarize himself with conditions ahead of his present position, or he who may not be in the employ of any one of the specialized departments may learn the necessary details for use in his organization, the idea being to fit the already employed man to broaden and increase his knowledge for the benefit of his own house."

"Not necessary in our line of business."

"Classes in each department would be important."

"No. I think neglect in the essentials is the principal trouble, as when a boy determines what he wishes to do for a life work then is the time for him to qualify for that occupation, but he wants in any event to have a good ground-work."

"———."

"Yes."

"Schools of Commerce should encourage a pupil to specialize on the particular type of business he may select."

"No. A general business education should be given to serve as a foundation for the subsequent training, through practical experience, in any special line."

"Good idea, but practical experience is best."

"I believe that the best training a young man can find is by actual experience and work in a commercial house, banking house, or business institution. I think much valuable time is lost by youths in attending schools of commerce, and I do not favor providing such schools at public expense. I believe that manual training schools would render greater service than commercial schools."

"Yes."

"If the course could be made practical, yes."

"No."

"The best school of commerce is a well-conducted business office. Given the three R's, the basis of stenography and typewriting and the principles of bookkeeping, I would rather take the applicant than if he was a graduate from High School or a School of Commerce."

"Unless a young man proposes to devote himself to a specific branch, I think it is wise that he should have a fair knowledge of all branches of commerce."

"In general, yes. That the young man may have a proper interpretation of the special requirements of one class. Don't believe in multiplicity."

"A student should be permitted to elect whether he would take a general course in business or a special."

"No."

"———."

QUESTION SEVEN

It is manifest that to fulfill its best purposes commercial education should keep in constant touch with the business world and advance with the evolution of commerce. What methods can you suggest of promoting such a relation between the public commercial schools and the business houses of the city?

Answers to Question Seven

"Business men taking a more active interest, and being called into consultation more frequently."

"Teachers should study business practically and not only theoretically."

"Would suggest that the business men, particularly those who employ junior help, should from time to time be in communication with the Board of Education, that they may express their opinions from their point of view."

"Have no specific suggestions to offer."

"—— —."

"—— —."

"—— —."

"By occasional sending of circulars by commercial schools and colleges among the business interests."

"Wide-awake, conscientious, and ambitious instructors will find ways and means of keeping in pretty close touch with the business world."

"Unable to answer this question."

"We entirely agree that it is essential that commercial education should be kept in constant touch with the business world and advance with the evolution of mercantile development, and the method we would suggest is that the principals of pupils or graduating classes should ascertain, if possible, from the various pupils the particular business they wish to adopt, and lists of such pupils should be sent to important houses in order that they may make a selection of such employees as they may desire, either to fill vacancies or to provide a reserve of young men to be gradually absorbed as occasion may require."

- "Frequent lectures from successful men engaged in the actual business being taught."
- "There is no better way than to study the requirements and necessities of the business of the city — the trained educator analyzing the situation and arranging courses of instruction to meet the needs disclosed. Inquiries like the present ones are directly in line."
- "Yes."
- "I do not feel competent to answer this question."
- "One method, I would suggest, towards keeping Commercial schools in touch with the business world would be to have courses of lectures given to the students by experienced and practical men actively engaged in business."
- "I. By soliciting the managers of large corporations to address the pupils.
- "II. By voluntary services on the part of the pupils offered to large corporations."
- "Inquiries by representative commercial bodies, such as yours, and subsequent conferences with professional educational authorities."
- "This will hardly prove practicable, except through lectures of experienced business men, before and for the benefit of teachers in the Schools of Commerce."
- "It would seem possible to promote a relation between the public commercial schools and the business interests of the City, by having lectures on business subjects delivered before the advanced classes of the schools, by men actually engaged in various lines of work, by inspections of business places and plants of one sort or another. Students might be required to submit written reports of what they have heard or seen at these lectures or inspections. It might also be possible to assign to different students or groups of students the investigation of the main features of some particular line of business, the result of this investigation to be embodied in a report; such investigations could be directed by the instructor and an attempt made to have the coöperation of some one in the particular line of business affected."
- "I can see no way by which such a desirable contact between Technical education and Practical mercantile operations

can be sustained unless the Commercial colleges can secure the coöperation of experienced leaders in actual walks of commercial life, by getting such representative men to agree to give talks or lectures at different times to the classes in the commercial schools. It might be possible to secure a given number of bankers (by that I mean both National and private bankers), leading manufacturers and merchants, to agree to give such addresses on practical topics, rotating from year to year in getting a new list so that it would not be burdensome upon any, and it would be well to include, if possible, in such addresses or lectures some of those men who are professional business organizers, economizers, and systematizers."

"The methods adopted at the different Y. M. C. A. schools, that of having talks and lectures by practical and successful business men for their specialized classes, seem to be fairly suited for the purpose of keeping the student abreast of the times. If this method could be extended to the schools in a way adapted to the understanding of the student, and also in a more advanced manner to the higher classes, the student undoubtedly would be kept more in touch with the developments of modern business methods. Young boys should not be expected to grasp details of business. The student must be older, and, if possible, trained to some extent by actual experience to benefit by the teaching of men who do not realize the limitations imposed by inexperienced youth.

"If the teacher of commercial education in the day schools were able, at certain periods, to enter into some business organization, and through experience in the actual work of such organization refresh himself and use the workaday knowledge thus gained in his teaching, the student would naturally be benefited by the broader view of the teacher in the consequent departure from practically all theory to some fact. This would, of course, require coöperation from the business men of the city. Perhaps it might also be suggested that each school have a library of the business forms in use by different houses. These forms would be up-to-date, but should not be beyond the capacity of the pupil, the selection to be made by the

teacher and the uses explained and their correlation to the forms used in schools illustrated. The young man attending night school has more opportunities during his daily work of keeping himself in form as to the modern developments."

"All we want is bright, active, and trustworthy boys who are thorough in their work and write English correctly; a knowledge of German is desirable."

"Constant touch necessary with the development of daily business — a close relation with prominent men in each walk of business."

"In our experience we have not found as a rule that commercial college education was of much consequence."

"———."

"This question would be better answered by those that have been in touch with the situation, and by studying the systems of Germany, Switzerland, and some of our own Institutions, where advance has also been made of late years."

"We suggest that the Public Commercial Schools come more in contact with active business men. A course of lectures given by progressive, practical men engaged in active business would be valuable. We also suggest a consideration of the methods utilized by the Harvard Business School."

"The public commercial school should make a systematic attempt to keep in touch with their old pupils and learn from their employers why they succeed or fail. This will enable the school to choose studies and methods that tend to success and avoidance of failures."

"By having the Board of Education include not only professional but also business men."

"I would suggest that competent and experienced business men be employed to lecture on commercial and financial topics, the lectures to be followed by a period of time sufficient to allow the pupils to ask questions regarding the subject matter. As I have already stated, I believe the privilege of asking questions is likely to result in the stimulation and encouragement of knowledge."

"I regard Herman Schneider, Dean of the College of Engineering, University of Cincinnati, as one of the best

equipped authorities on this subject and I commend you to him. He has done practical and, I think, very valuable work."

"———."

"By giving courses of lectures on the growth of Commerce, its needs and requirements, and to stimulating the activity of the scholars to increase their knowledge and fitness for the opportunities that will present themselves in their future life."

"I can add nothing to the previous answer."

"I think that the Chamber of Commerce can be of great aid in establishing a system of coöperation between business firms and commercial schools whereby some certificate or recommendation by such schools would enable such students to readily find good positions at once in firms. Most banking firms prefer to engage German clerks (as educated in Germany) who understand English, French (and occasionally Spanish), and who appear to have a knowledge of business methods, no doubt taught and enforced in the German high schools."

"The commercial colleges in their teaching well illustrate the best methods. There the boy can decide the class he leans to and develop."

"(a) Keep up a constant propaganda among the merchants of the advantages of commercial education.

"(b) Let the Chamber of Commerce as representing the best business interests of the City grant diplomas and medals in a public way, showing great honor to the recipients and thus making same of considerable value."

"———."

"———."

GENERAL COMMENTS IN THE LETTERS RECEIVED

"For ordinary business, insist upon a thorough, practical knowledge of arithmetic even if higher grades of mathematics are abandoned. Learn to spell well. Handwriting should be plain and legible, not necessarily handsome.

"Dictation or letter writing should be clear, definite, and well expressed, so there could be no doubt as to meaning.

"For foreign trade a good knowledge of Geography is very essential."

"Would say that for the class of people employed in our business, — too much emphasis cannot be laid on a thorough education in reading, writing, and arithmetic. Many who apply to us, and that we have to employ, are sadly deficient, particularly in fractions, even though they have graduated from the Grammar-school."

"The public schools and colleges, in cases where the students intend to enter a commercial career, ought not to be so *insistent* about the study of Greek and Latin. A good training in Commercial Law, Arithmetic, Grammar, and the Languages would in my opinion be much more beneficial."

"Dear Sir: —

"Acknowledging your circular letter of the 15th inst., would say, we seldom employ young men in this office, preferring to select bright lads fifteen or sixteen years of age, who can write a good hand; and who are advanced in our service, to fill either clerical positions, or become salesmen; and oftentimes, the heads of different departments, and our branch offices.

"If our public schools would attempt less, they would accomplish more in the writer's opinion; what I wish to express is this; that a lad who can write a good hand and who has been well schooled in spelling, is what we require most.

"Bear in mind that my remarks refer to a Commercial establishment doing business exclusively in the United States."

"The time is rapidly approaching when the needs of this country for its agricultural and pastoral products, will be equal, or more than equal, to the supply, the consequent result of which will be a great stimulus to foreign trade in manufactures. Therefore, we are inclined to lay special stress upon the importance of having the pupils in public schools taught the value and importance of our relations to foreign countries and the possibilities of commerce which lie therein."

“Dear Sir:—

“I enclose categorical answers to your questions as submitted. Our business is of a kind where to a large extent we must train our own employees. It is our principle to secure a capable head for a department and make him responsible for the successful execution of the work and it is the duty of the General Manager to see that the departments dovetail together. With a man at the head of each department and in most departments, with a capable assistant, we find it possible to use a great deal of cheap, clerical labor.

“The effect of theoretical business training is hard to judge. Certainly a large number of those who receive a theoretical training do not seem to have profited much by it. Some young men apparently have in them the ability to grasp what is expected of them and to accomplish it. Others do not have this ability and apparently never get it. It is undoubtedly true, however, that a man is not necessarily a failure because he does not make a success of the first position in which he is placed. In our large institution, we do not find it necessary to get rid of an individual altogether unless he is chronically unwilling to work or unusually stupid. Usually, we find some place where he can do well his part of the work of the machine.

“Studies that train the mind and make the individual capable of grasping situations in dealing with them, are in my opinion very beneficial for a young man going into business. The details of the business itself do not have to be learned in a day and the young man usually is able to assimilate them gradually after he has started his work.”

“If there is one weakness which shows above others, it is in my opinion, that too little attention is given to the study of the English language. The man of the future who cannot talk or write logically will be severely handicapped. The man who succeeded in the past with little command of English will have a hard road to hoe if he attempts to succeed in the future with such a handicap.

“Great tendency among young business men today to be unreasonable, as a class they are inclined to go to extremes, this is a fault of the American people as a whole.

- "A business man ought to have a little legal training, that he may realize there are two sides to every problem."
- "I answered these questions in a general way. In one department of our business we prefer young men with a college education, but as a rule, when we engage boys that begin at the lowest rung of the ladder, we look for such that are active and trustworthy, will do their work thoroughly, and can write English correctly. The last two qualifications are the most difficult to find. The spelling of the applicants is as a rule very bad, and the great trouble we find with boys is their lack of thoroughness."
- "My experience is, that to obtain efficient men, in Banking, we must look largely for Europeans. They are the best trained in calculation, relating to Banking, and imbibe from earliest childhood, the thorough elements of a business training. As important as any other part of the education, is a correct knowledge of the English language.
- "This means a completed course of study in the High Schools, with *great* leaning towards a completed college course of three to four years."
- "I am personally clearly of an opinion that our schools make a serious mistake in not giving a boy the education required in any large business and my experience is that a very large proportion cannot write a well written letter. We require each applicant to send us a written application. If you were to read them it certainly would be a great surprise to you to note the small proportion of even fairly well written applications.
- "The necessary essentials are sadly lacking and many recommendations we receive from teachers are a surprise to us. Apparently non-essentials are considered of the most importance."
- "AMBITION is the great essential. The ambitious will endeavor to qualify and will avail themselves of opportunities.
- "To those who wish to enter MERCANTILE LIFE, a good education is helpful, and should be attained if possible. Studies should be those that bear especially on occupation it is proposed to follow.

"A college course is not ESSENTIAL for success in business.

"College life gives polish and carriage and is of advantage socially; nevertheless, four years spent in College can often be better employed in studying the special occupation which the boy or girl intends to follow. It may easily happen that College life and studies will unfit the student for business life.

"A good foundation in READING, WRITING, ARITHMETIC, and SPELLING, is absolutely necessary, and often neglected for a smattering of other important studies.

"TRADE and COMMERCE SCHOOLS ARE DESIRABLE, both for college students and those who have not been able to pursue the higher branches."

"Commercial schools should have an efficient employment bureau, with representatives who are in constant touch with the business world and positions should be obtained for the graduates without expense to them or to their employers."

"Find what the young man has a special liking for or acquaintance with. If he is undecided, advise him to follow his father's occupation even to a trade."

FORMS USED IN THE BOSTON INVESTIGATIONS

The two forms on pages 184 and 185 were used in the investigation conducted by the Committee of the Boston Chamber of Commerce, discussed in Chapter IV (pages 61 to 68).

The three forms on pages 186 to 188 were used in the investigations conducted by The Women's Educational and Industrial Union, of Boston, in 1913-1914, discussed in Chapter IV (pages 53 to 61).

BOSTON CHAMBER OF COMMERCE
Special Committee on Commercial Education

VOCATIONAL HISTORY

This Committee wishes to gather as many individual records as possible in order to have a broad basis of facts upon which to recommend commercial courses. NO ATTEMPT WILL BE MADE AT ANY TIME TO TRACE ANY RECORD TO ANY INDIVIDUAL. YOU ARE REQUESTED NOT TO SIGN YOUR NAME NOR YOUR FIRM NAME.

- I. Line of business — as 1. Department Store? 2. Wholesale Groceries? 3. Insurance? 4. Or?
 (Please write your business on line above)
- II. How many years have you worked?
- III. What is your principal duty? Buyer of Seller of
 Stockkeeper. Bookkeeper. Stenographer. Or?
 (Please fill in your position)
- a. About how much per week does this pay you?
- b. Please state briefly the work you first had, your pay in that work, and your principal changes or transfers.

- IV. What school training did you have?
- a. Grammar grades? years
- b. Public commercial high school course? years
- c. Private commercial high school course? years
- d. Public General high school course? years
- e. Public Technical high school course? years
- V. Have you made any use of the following subjects?
- a. Stenography? d. Penmanship?
- b. Typewriting? e. Mental Arithmetic?
- c. Bookkeeping? f. Any other school study?
- If so, was it in getting your first job or have you used the knowledge in your work since?

- VI. What subject would have been of value to you if you could have studied it in school?
 Please suggest any subject that you think it would be well to have taught, whether it has ever been taught in any school or not.

**PLEASE USE REVERSE OF SHEET FOR ANY REMARKS YOU
 WISH TO ADD**

NOTICE.—Please state whether this blank has been filled out by a man or woman.

BOSTON CHAMBER OF COMMERCE

Special Committee on Commercial Education

Form of Questionnaire to be Filled Out by Personal Interview
with Employers

Line of Business	Employing About	Employees
------------------	-----------------	-----------

- I. Do you require a grammar school training?
- II. What education beyond the grammar grade seems to you valuable?
- III. What are the better paying positions in your business?
- IV. Are boys or girls who start in the office and prove efficient, in line for these better paid positions?
- V. Does a knowledge of stenography and typewriting help a boy or a girl get into the better paying positions?
- VI. Is there any training which could be given in school which would make your employees better fitted for their work with you?
- VII. Do you find your applicants as well trained in the ordinary school subjects as seems to you desirable? If not, what are the principal defects?

**BOSTON
220 PUBLIC
SCHOOLS**

Last Name of Pupil		First Name		Address		District	Evening School
		Mrs. Miss					
1	How old were you on your last birthday?	Where were you born?		How long have you been in the United States?			
2	In what country was your father born?	What was your father's occupation?		At what age did you begin school?			
3	How many years have you attended the Boston Grammar Schools?	What grades?		What other schools?			
4	Did you graduate from the Grammar School?	What grade were you in when you left school?		At what age did you leave school?			
5	What day High Schools have you attended?	How many years did you attend?		How old were you when you left?			
6	Did you graduate from a day High School?	How many years did you attend?		How long have you been at work?		Yrs.	Mos.
7	Name in order below any other schools attended such as Public Evening Schools, Trade Schools, Business Schools, Art Schools, or others						
8	Name of School	How long attended?	Name all courses which you took in such schools				
9							
10							
11							
12	Do you live at home?	With what members of your family do you live?		For how many firms have you worked?		Wage	
13	Are you employed during the day?	For what firm do you now work?				Women?	
14	What is the business of your firm?	What work do you do?		Men?		What time do you stop work in the evening?	
15	How many people are employed in the room where you work?	How many minutes do you have for lunch at noon?		What kind of work did you do?		How long have you been out of work?	
16	What time do you begin work in the morning?			1st hour		2nd hour	
17	If out of work: for what firm did you last work?	Or a different one?		If so, for what?		Date	
18	Subjects which you are now studying in the evening school?						
19	Are you fitting yourself for present position?						

SCHOOL INVESTIGATION — PERSONAL SCHEDULE

BOSTON
PUBLIC
SCHOOLS

1 NAME _____

2 Age _____ Birthplace _____

3 If Adrift: _____ Boarding _____

4 If at home: _____ Head of family _____

5 Family: Father _____ Mother _____

6 Dependents: Number _____ Who _____

Address _____

Years in U. S. _____

Furnished Room _____

Birthplace of father _____

Who _____

Conjugal Condition { Single _____ Married _____ } Floor _____

Widow _____ Divorced _____

Y. W. C. A. or other home _____

Relative _____

Living with whom _____

Dependents _____

Occupation _____

Occupation of { Father _____ Mother _____ } Contributions to home _____

Other wage-earners: Number _____ Who _____

7	Schools	Name	Place	Time attended Yrs. | Mos.	Grade left	Grad- uated	Age at leaving	Name of Course	Subjects of use in present occupation
8	Grammar								
9	High								
10	Evening								
11	College								
12	Commercial								
13	Correspondence Course								
14	Private Lessons								
15	Y. W. C. A.								

16 Preliminary practice

17 What other courses or preparation would have been of use in present position?

Date _____ Investigator _____ Source of information _____

**BOSTON
222 PUBLIC
SCHOOLS**

SCHOOL INVESTIGATION — BUSINESS EXPERIENCE

1 NAME

Address

Occupation

2 Firm

Address

Business

3 No. Positions

No. Years Experience

4 Years	Time employed Mos.	Firms	Addresses	Business	Kind of work	Wages		How found	Leaving	
						Begin	End		Time idle after	Reasons for
5										
6										
7										
8										
9										
10										

11 Present Positions:	is pay Income regular	Maximum Arrears	Advances for Office Supplies	Maximum Amount	Deductions	Tardiness { Absence	Amount rec'd at Xmas
12 Hours: Begin	a. m. End	p. m. Saturday usual?	p. m.	Lunch hour	Total hours daily	Total hours weekly	Variations
13 Past year: Overtime season		Is overtime usual?	Maximum	How often	Rate of pay: time	Money	
14 Time idle: Vacations: with pay	No. weeks	without pay	Proportion of vacation to length of service	Maximum time allowable	Legal holidays: Number	Church holidays: Number	Pay
15 Sickness: Time lost	days	wks. mos.	Pay for	Maximum time allowable	Other reasons	Pay for	
16 Health: past	Present	Physical effects of work	Pay for	Medical supervision	Insurance		
17 Workroom: No. employed: Men		Women	Lighting		Ventilation		
18 Lunch room			Dressing room		Rest room		

Date

Investigator

Source of information

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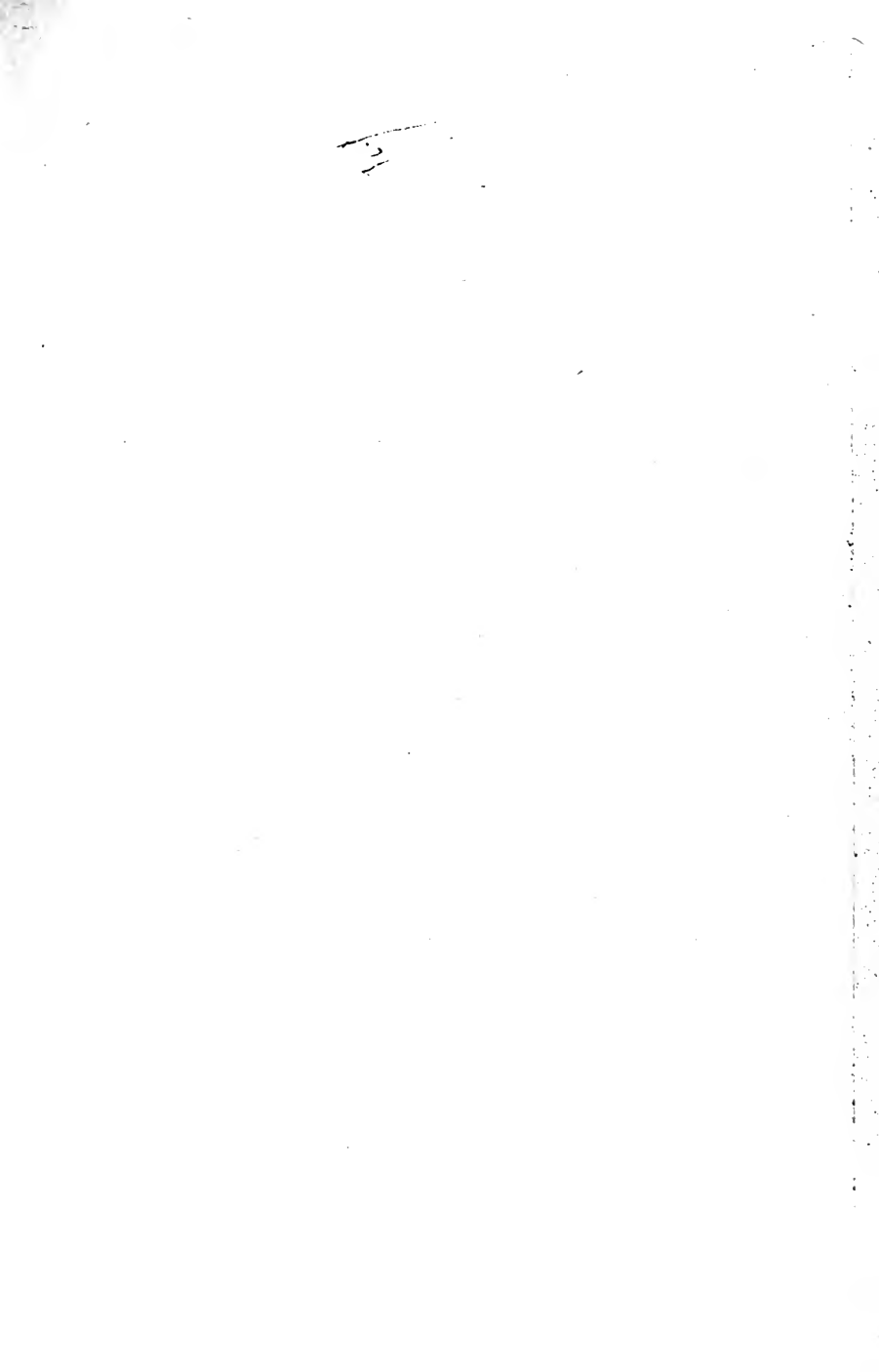
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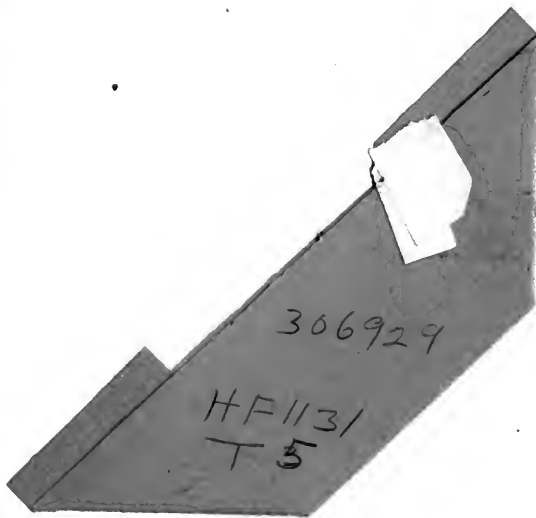
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